The American Artisan
And Hardware Record

Vol. 50. No. 18. CHICAGO, NOVEMBER 4, 1905. $2.00 Per Year.

BOMMER SPRING HINGES
(ESTABL. 1876.)
ARE THE BEST
BOMMER BROTHERS, MFRS. 256-276 CLASSON AVE. BROOKLYN, N.Y.

Bolts, Carriage Forgings, Etc.

Catalog and Prices on Application

COLUMBUS BOLT WORKS, Columbus, Ohio.

NIAGARA

COW CHAINS
Oneida Community
ONEIDA, N. Y.

This Space for Sale. Inquire of Daniel Stern, 69 Dearborn St., Chicago.

Atlas Bolt & Screw Co.

CLEVELAND, O
Manufacturers of
Stove Bolts
Stove Rods
Stove Rivets
Mica Bolts
Fancy Nuts
Register Pins
Hinge Pins
and kindred articles for the
STOVE and RANGE
Manufacturing Trade.

Always On Top

Any weak spot in your roofs should be attended to now. A leaky roof can cause an immense loss on short notice. American Seal Elastic Oil Cement is sure cure. If your roof is old and cannot be soldered this is the one thing to use. American Seal Roof Paints, Metallic and Graphite, preserve and protect. None better, none just as good. Prices are right even if the quality is the very best.

Agencies:
THE PERKINS ROOFING & SUPPLY CO. 235 Lake St., CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, MO.

BLACK DIAMOND FILES and RASPS

TRADE MARK
PERFECT—ALWAYS

Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.

G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA

"TRIUMPH" CHAIN

HAS TWICE THE STRENGTH OF WELDED.
SEND FOR FREE SAMPLES, TABLE OF TESTS AND ASK QUESTIONS.

THE BRIDGEPORT CHAIN CO., Bridgeport, Conn.

OVER TEN MILES OF CHAIN PER DAY. WE LEAD.

ALL CAST IRON.

Costs 1.4 of a cent an hour for gas to run it.

3 Sizes—34-in., 36½-in. and 38½-in. to urn.

A Dorcas Good Luck Gas Heater

¶ Will heat the average dwelling house at the cost of ¼ of a cent an hour in cold weather.

¶ A prominent railroad company has adopted this stove as their standard after exhaustive competitive tests conducted by their heat and light department.

¶ This railroad company reports to us that the most they can make these stoves burn is 15 feet for the No. 5, 17 feet for No. 6, 19 feet for the No. 7 (gas per hour).

¶ They further report that during the coldest weather last winter—that they heated passenger stations which are 60x20x14 feet with one No. 6 Dorcas, keeping the temperature to 70 degrees and never burning over 15 feet of gas per hour and keeping the average much below that.

¶ You can sell the stoves at $14.00, $15.50 and $17.00 and make 50 per cent on your money.

Are you doing as well? We can fill orders.

PITTSBURGH STOVE & RANGE CO., Pittsburgh, Pa.

WHY DON'T YOU SELL *The* CLERMONT ?

The **Clermont** Air-Tight Hot Blast is made on a different principle from all other Hot Blast Heaters.

In the **Clermont** the air is admitted to the Fire Bowl through perpendicular openings evenly distributed around the Fire Bowl. These openings admit air uniformly on all sides; and no matter whether the Fire Bowl is filled with fuel, or contains a very low fire, air is constantly forming a perfect combustion within the chamber, consuming all the smoke and gases.

If you are not now selling the **Clermont**, we offer you a golden opportunity to build up a very satisfactory business on a reliable Hot Blast—one that will give absolute satisfaction to the most exacting customer. Descriptive matter and special prices on request.

Gem City Stove Co.

DAYTON, OHIO.

Lyon Brothers—Bargain Headquarters of America

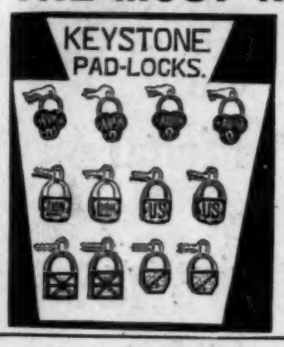
Bargains—Bargains—Bargains

BARGAINS ARE THE ONLY "SURE CURE" TONIC FOR ALL RETAIL STORE ILLS

The few bargains shown on this page were selected at random, and if they do not meet with your requirements remember that we have thousands of others from amongst which you can select enough trade boomers to satisfy your every need.

Our Fall and Winter Catalogue No. 430, brimful of seasonable bargains is just from the press. Every dealer should have a copy of this book. We will prepay one to you upon request.

THE MOST RELIABLE LOCK BARGAINS OF THE YEAR



ASSORTMENT No. K12. Made up of 8 brass plated, 2 wrought steel japanned and 2 wrought steel nickeled locks. Every one different. Each with 2 keys. Average size 1¼x1¼ inches, displayed on 12½x14-inch strong card. Price per assortment of 1 doz..... **75c**

ASSORTMENT No. K14. Consists of 4 brass plated, 4 wrought steel oxidized and 4 wrought steel japanned padlocks on strong 12½ x 14-inch display card. Average size of locks 2x2 inches, assorted styles. These are strong, heavy locks. Price per assortment of 12 padlocks **$1.90**

The Famous Columbia Cutlery Co.'s Electric Magnetic Razor AT $3.75

WOULD BE GOOD VALUE AT 25 PER CENT MORE

40 COLUMBIA CUTLERY CO.'S ELECTRO MAGNETIC ringing steel razor, ⅞-inch blade made of best quality Norwegian tempered steel, highly crocus polished and finished, pearl inlaid black rubber handle. Case embossed in gilt lettering. Doz..... **$3.75**

Genuine Stag Handle 2-PIECE CARVING SET

PRICED DOWN TO 43c SET

Made of Best Quality English Tempered Double Shear Steel

1281 2-piece, genuine stag handles, 8-inch Turkish scimeter swedged blade, hand forged from best quality Norwegian tempered shear steel and ground to a keen cutting edge, nickel plated bolster and cap, 2-tined fork with spring guard. **Special value at price we quote.** Pair in box. Pair..... **43c**

"New Idea" MASLIN KETTLES

Blue speckled enameled outside and white enameled inside, cast iron. Outsells the common maslin kettle three to one. For cleanliness nothing excels the "New Idea."

2-quart "New Idea" kettles. Each..... **33c**

3-quart "New Idea" kettles. Each..... **40c**

4-quart "New Idea" kettles. Each..... **46c**

5-quart "New Idea" kettles. Each..... **57c**

6-quart "New Idea" kettles Each..... **60c**

8-quart "New Idea" kettles. Each..... **67c**

10-quart "New Idea" kettles. Each..... **73c**

WE SAVE YOU 50c DOZ.

These High Grade JACK KNIVES

If bought anywhere else would cost you $2.25

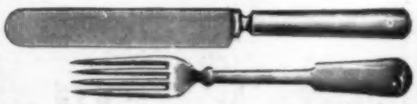
Our special price, dozen **$1.75**

Put up in handsome cloth lined rolls.

1283 12 different patterns—stag, bone, dogwood and ebony handles, single and double bolstered, all two bladed knives highly polished and finished. Most of them are made to retail at 35 and 50c each. Roll is 16 inches long, made of leatherette, strongly stitched and lined with purple cloth and fitted with cloth flaps. Knives are held in place by ⅜-inch braid which runs through center of roll. Price per dozen knives, including roll..... **$1.75**

A Record Breaking Price On Tipped Pattern Steel KNIFE AND FORK SETS

PRICE 43c PER SET



1285 Made of the very best quality steel, in the popular tipped pattern. They are very highly finished, have the appearance of solid silver, and will wear almost as well. Neatly wrapped. Our special price, set..... **43c**

LYON BROTHERS

MADISON, MARKET AND MONROE STS. CHICAGO

Largest Wholesalers of General Merchandise in America. We Sell to Dealers Only

White's Beacon

115 117 119

Burns
Slack
Lump Coal
Hard Coal
or Coke
without
smoke or
soot

Won
Gold
Medal
at
World's
Fair
1904

Dealers who miscalculated their sales are already telegraphing additional orders for these stoves. One dealer writes:

"They are the stuff"

Another says,

"Unless all signs fail, I'll have a good sale on the Beacon this fall. Will you be able to fill orders without delay?"

We Will

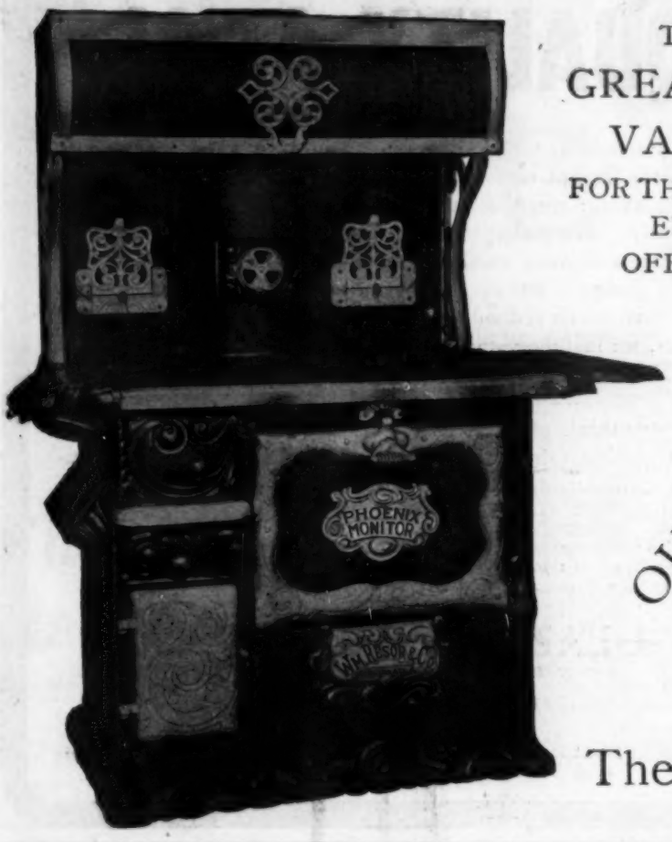
WHITE'S STOVES & RANGES THE FUEL SAVERS

Thomas White Stove Co.

Quincy, - Illinois

WHITE'S STOVES & RANGES THE FUEL SAVERS

PHOENIX-MONITOR



THE
GREATEST
VALUE
FOR THE MONEY
EVER
OFFERED

OUR PRICES ARE RIGHT

THIS
IS SOMETHING
TOO GOOD
FOR YOU
TO
OVERLOOK

WRITE FOR SPECIAL PRICE.

The William Resor & Co.
CINCINNATI, OHIO.

Foster's Peerless

A NEW COOK FOR THE SEASON.

Combines the best features of all its predecessors and incorporates new characteristics entirely its own. Every part made of the highest grade of material and calculated to meet the demands of the day.

STUDY IT UP IN OUR CATALOG.

THE FOSTER STOVE CO. IRONTON, OHIO.

Will be in great demand this fall. **Brings in good profits.**

B. & B.—QUALITY AA AI

No. 30.

We started out in the Oil Stove business a good many years ago with the idea of making our trade-mark, Brightest and Best, mean something; mean all that the dictionary definitions of the words imply. We admit that this was a lofty ambition, but we were sincere and have stuck to the idea ever since. We should like you to judge of our success by the number of satisfied customers who have continued with us all this time. Look over our list of jobbers, for instance, and, with hardly an exception, you will find the old names there, in company, of course, with many new ones.

Can you think of a severer test? Of stronger evidence that we treat people fairly, that our goods will stand the severe inspection of the buying public, that we successfully meet keen price competition?

Our printed matter is so arranged as to give you complete information with reference to the prices, appearance and construction of our several patterns. It is yours for the asking.

GLAZIER STOVE CO.,
CHELSEA, MICHIGAN.

CHICAGO AGENTS:
HIBBARD, SPENCER, BARTLETT & CO. W. D. SAGER, 38 Michigan St.

The Globe Hot Blast

POWERFUL, CLEAN, ECONOMICAL

No Smoke
No Soot
No Dirt

No flue to unstop—no pipe to clean out—uniform heat all the time—a warm room in the morning—burns any kind of fuel—holds fire without attention, 24 to 48 hours—keeps the floor hotter—radiates more heat—warms a larger space—takes less fuel than any other stove made—the cheapest grades of slack or soft coal screenings can be used with the same convenience and pleasing results that you have heretofore obtained from hard coal only.

The Globe Stove & Range Co., KOKOMO, INDIANA.

VAN'S RANGE

Patent Improved Wrought Steel Portable

For Hotels, Restaurants. Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The John Van Range Company

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO

MATCHLESS STEEL RANGES!

Stimulators for Dull Business

Combine WEIGHT, STYLE, FINISH and WORKMANSHIP

The kind you should handle to meet competition.

We want one good dealer in every town.

No. 118N

in aluminum trimmings,

$15.30

NET 15 DAYS

Compare sizes, weights and prices with other lines.

We don't sell datings. Our terms are net cash 15 days.

Our line shown all the year round in the Manufacturers' Exhibition Building, Chicago.

No. 118N. Weight 352 lbs.

Have weight where most needed, in the body, oven and firebox.

Every sale made means a satisfied customer.

The MATCHLESS is the missing link to kitchen happiness.

Cheap in price only.

No. 118N

in full nickel trimmings

$17.10

NET 15 DAYS

Size of oven 17x12x21 inches; top cooking surface, 30x36 inches.

Write for Catalogue at Once and Get in Line.

Kindly mention The American Artisan

LANDAY STEEL RANGE CO., 2615 North 15th St., ST. LOUIS

10 BEST REASONS WHY THE KING BEE AIR BLAST SHOULD BE IN EVERY HOME

Nos. 314-316-318-320-322.

Because—It is the **Cleanest,** most **Economical,** most **Perfect Operating** and best all around stove of its class made.

Because—It **does not** require an **expert** to operate it.

Because—It is mounted with our **Famous Anti-Buckling Ring,** which prevents **Drum** from **warping.**

Because—It is **guaranteed** to be **Air-Tight** and will always remain so.

Because—It has an **Exposed Fire-Pot,** an essential feature to insure **Long Life** and powerful **Base Heat.**

Because—It has a Broad Deflecting Ring, which keeps Base as Hot as any **Hard Coal Base Burner.**

Because—It has a **Large Ash Pan.**

Because—**It** is **Unsurpassed** as a **Gas** and **Smoke Consumer.**

Because—It has our **Patent Perforated Puff Preventor,** which positively prevents explosions so common to all other Hot Blast Air Tight Stoves.

Because—It burns **Soft Coal, Hard Coal, Coke, Slack, Wood, Cobs** or **any kind of fuel.**

It will pay you to investigate the **King Bee Air Blast.** It **will save one-half the Fuel Bill.**

THE STOVE IS ALL RIGHT. THE PRICE IS ALL RIGHT. IT IS A TRADE WINNER.

Ask for King Bee Booklet, prices and territory.

We are the Original Inventors of the Down Draft.

CULTER & PROCTOR STOVE CO., PEORIA, ILL.

Manufacturers are cautioned against using our Patent Perforated Puff Preventor.

Fifty years of growth, experience, and development have placed

The Galusha Stove Co.

FOREMOST AMONG STOVE MAKERS

We are familiar with old points of failure, and have studied and adopted most modern, successful features. Our products are not experimental apparatus, but practical results.

The Howe Ventilator

THE NORMAL LINE OF RANGES

fully substantiate our claims. Our plant is being constantly improved and the markets for better material and highest skill assiduously exploited.

Before considering a line of stoves and ranges for the winter season, dealers should

Write to us for Catalogs

Galusha Stove Co., Rochester, N.Y.

MILLER'S COMBINATION COAL AND GAS RANGES

WITH GAS WATER HEATER AND ROLLING TOP OVEN SHELF OVER ALL.

These ranges are constructed so that if any accident should happen to either of the Ranges they can be taken apart, leaving one of them to cook on while the other is being repaired, which cannot be done with other combination Ranges as they are built in one piece and cannot be taken apart. The Gas Range in our combination is built of the same heavy material, and to conform to the same general appearance as the Coal Range, giving us the strongest, neatest and most compact Range **in the world.**

The Gas Water Heater can be attached to either this side or the back of the Gas Range as desired.

THE WM. MILLER RANGE & FURNACE CO., POST OFFICE SQUARE CINCINNATI, OHIO

Here's a Hot Weather Snap for Wide-Awake Range Dealers

I am going to sell 1000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys out of trouble during the hot weather by keeping my foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60. each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a life time, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

THE MODEL RADIATOR

For Soft or Hard Coal

Handsome
Efficient
Simple

A Comfort and Pleasure to the Housekeeper

It embodies many new features: A draft register which insures cleanliness and perfect control of air supply, a large ash pan that catches the ashes, a new method of holding and ventilating the sheets of mica, so they will not get out of place or smoke up. All of these and many other new features patented and therefore can not be copied.

Can be sold most readily

For further details see our catalog.

The PORTSMOUTH STOVE & RANGE CO.

Portsmouth, Ohio

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

MORLEY BROS., Saginaw, Mich., Wholesale Agents for Mich.

Chief among the characteristics that make the

CHAMPION STEEL RANGES

different from other ranges is the

Double Flue Hot Blast

The additional flue is below the main heating flue and conducts the air through the ash pit to the combustion chamber. The cold air is drawn from the floor, and in passing under the main heating flue becomes heated, thereby producing a more perfect combustion and economy in fuel to the extent of heat imparted to the air in its passage. It is an interesting process and should be studied up by the dealer.

WRITE FOR CATALOG

Champion Steel Range Co., Cleveland, Ohio

Smith's Hot Water Attachments

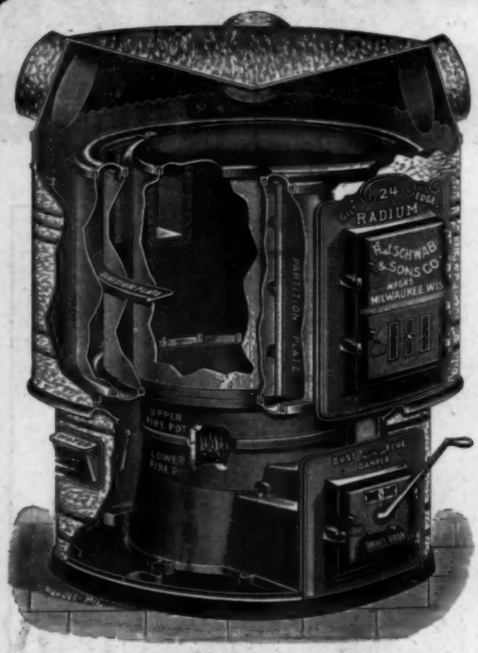
Are known from one end of the country to the other. They are used in almost every successful furnace job. They are made in all capacities, from a 30-gallon tank to one carrying 1,000 ft. of radiation. Our booklet tells the story.

CHAS. SMITH CO., 103 Lake St., Chicago.

W. C. T. HAMILTON, Minneapolis, North Western Agent.

Omaha Stove Repair Works, Western Agents.

H. A. Goold, Hiawatha, Kans., writes April 3, 1904: "You may discontinue my ad, as I have had so many answers that I was surprised. Your paper is well worth the subscription price, and I cannot see how any tinner wants to get along without it."



Now another unique feature in

The Gilt Edge Radium

is the

Double Circuit of the Products of Combustion

and the wide area they have to cover before leaving the furnace. After complete combustion in the big dome they enter the radiator through the rectangular opening at the rear, pass around to the front above the division plate until they strike the partition plate, which deflects them under the division plate, to pass out into the smoke pipe at the rear. In thus covering the double area, which is at least twice the area covered in the ordinary short circuit, Horse Shoe radiator, the products give off

FOR RADIATION MORE THAN TWICE the AMOUNT of HEAT

given off by the same elements in other furnaces, and the smoke that leaves the apparatus is practically cold. For full description

SEE OUR CATALOG

THE FURNACE MEN

R. J. Schwab & Sons Co., MILWAUKEE, WISCONSIN

You can see the Gas Ignite

in the Shoals Fuel-saving Attachment!

There's no guess-work about it!

The Shoals Attachment rests directly *over* the burning coal,—the gasses pass up through the holes or "jets" in the Attachment,—and ignite. You can *see* them ignite!

Any Helper can install the Shoals Attachment in 20 minutes,—in any warm air furnace, heating stove, or kitchen range.

It will *absolutely* save *one-third* to *one-half* the user's coal,—and give more heat.

The Shoals Attachment is entirely different from any smoke-pipe device, hot blast attachment or draft regulator.

But send for our interesting booklet,—and get our Exclusive Agency Proposition.

Now is the time to start the sale!

NATIONAL HEATING APPLIANCE CO.

Sales Department, UTICA, N. Y.

Western Office: 145 LaSalle St., CHICAGO.

VALUE IN "IMPERIAL" PATENTED WARM AIR FURNACES.

Burns soft or hard coal or slack satisfactorily, and DOES NOT LEAK GAS OR SMOKE into the house. Not equalled for durability, economy, heating qualities and easy to repair features.

Low tonnage price. Large stock. Investigate at once.

THE CANTON FDY. & MACH. CO., Canton, Ohio.

Patterns, Castings, and Machine Work.

EMPEROR FURNACES For Wood

SIMPLE—SAFE—DURABLE—ECONOMICAL IN FUEL

The Best and Cheapest Line of Wood Furnaces. Furnished for Either Brick or Galvanized Iron Casing.

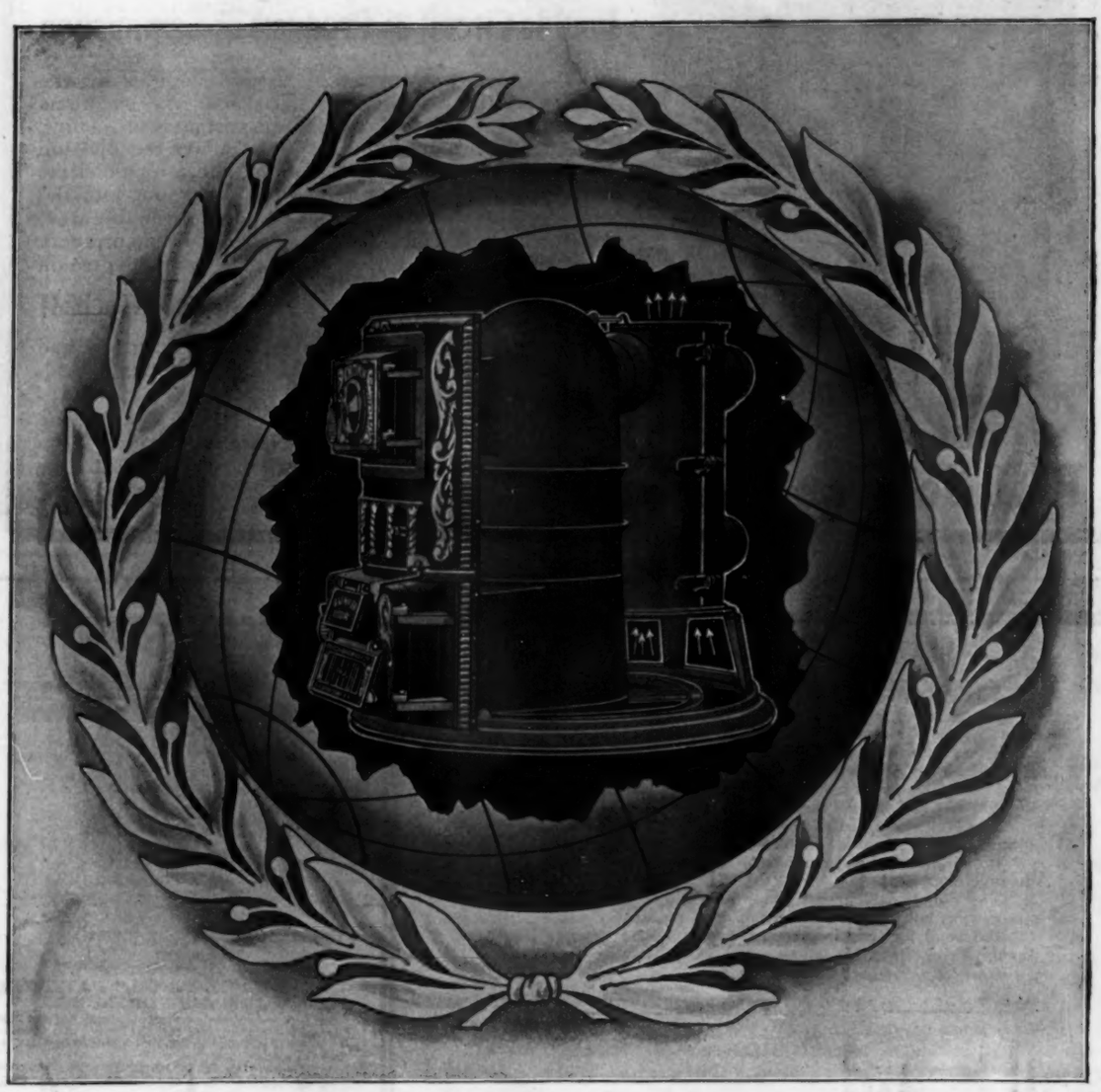
BERGSTROM STOVE CO.

Send for Catalogue. **NEENAH, WIS.**

THE NEW "LOW DOWN"

Crown Warm Air Furnace

Patented



We are going to fill the whole world with our furnaces and

ABOLISH WINTER

We are sorry to see some people inconvenienced by cold weather. As soon as we shall have accomplished our mission here we'll spread out to other parts of the universe. The moon has been suffering for the lack of a good furnace, but we have no time to fill their orders now. Our nearer neighbors need our attention. Send in your orders in a rush. We'll probably have to sell a few to Mars too. Just received from there a request for a few

CARLOADS OF OUR CATALOGS

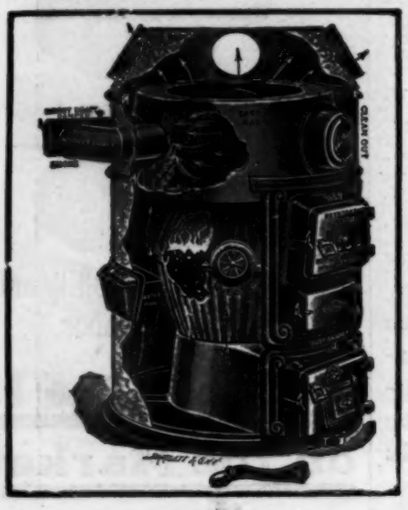
March-Brownback Stove Co.

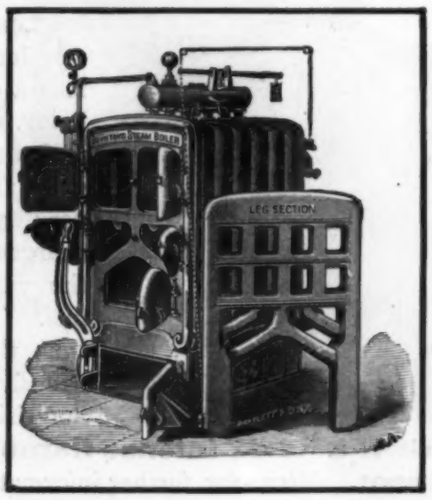
POTTSTOWN, PA.

BOYNTON

FURNACES, STEAM and HOT WATER HEATERS

Have stood for an honest value for 56 years. They have always worn well—they have required very few repairs—they have given out plenty of heat with a small expenditure for fuel—they have given a steady rather than a spasmodic heat—and that's why dealers have found them a desirable line to handle. Many a dealer has found that the handling of Boynton heaters has been a big help in building him up a reputation for the best work.





Shall be pleased to send you a catalogue and price list.

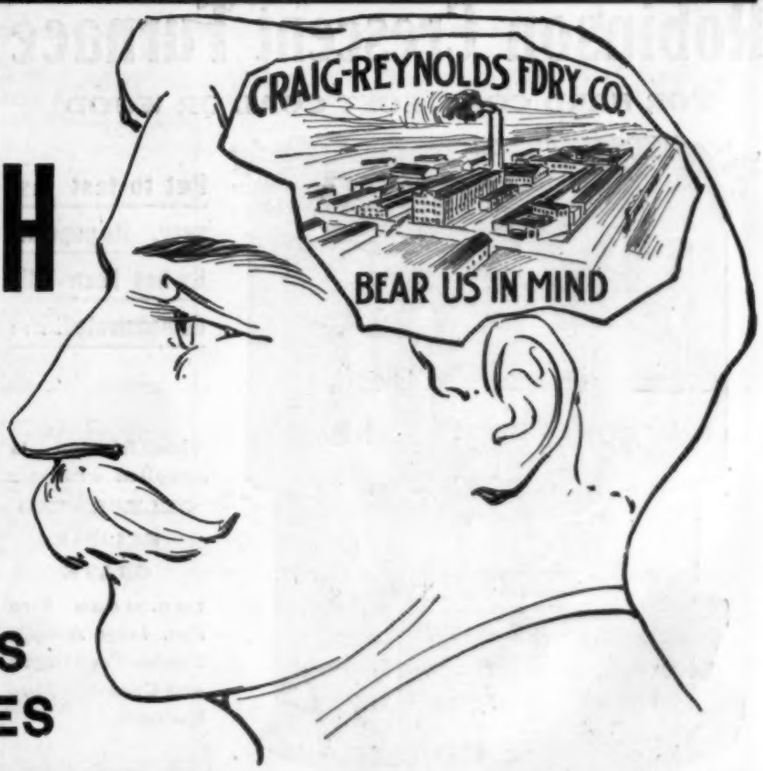
The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO 207-209 Water St., NEW YORK

BEAR US IN MIND

TRIUMPH

HOT AIR FURNACES



MANY STYLES
MANY SIZES

JOHN KONTNY, WESTERN AGENT, 65-67 N. Desplaines St., CHICAGO.
THE CRAIG-REYNOLDS FDRY. CO., DAYTON, OHIO.

Mfrs. Triumph Furnaces, Triumph Hot Water and Triumph Steam Heaters

Gas and Soot Burning Process

Covered by Letters Patent.

Entirely Our Own

It is a very interesting process, both from an economical and scientific viewpoint. Energy that in the combustion systems of other furnaces goes to waste is here entirely utilized. It is accomplished in this manner: A volume of air flows regularly into a channel in the fire bowl lining, which, after being carried around the bowl several times until it attains a very high temperature, discharges itself profusely over the whole surface of burning fuel. The liberation of oxygen from the air follows instantaneously and attacks the carbon rising from the fuel. The result is **a vivid intense flame in place of clouds of soot.** Write for further information.

The Meyer Furnace Co., Peoria, Ill.

The Handy Furnace Pipe

Insures Safety, Durability and Economy of Labor.

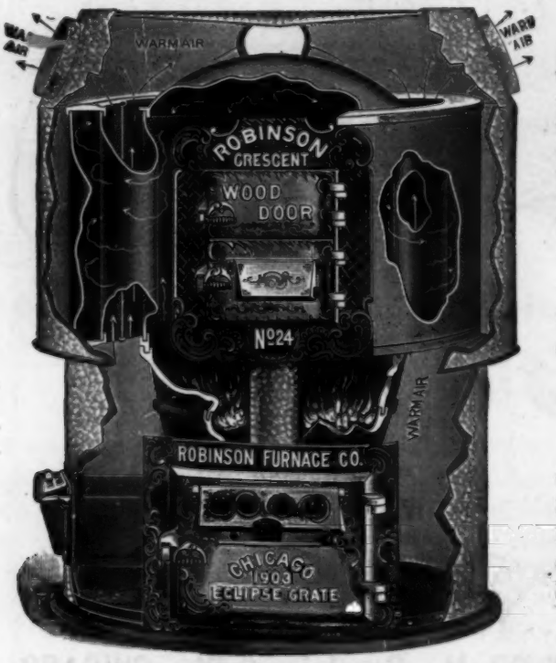
Nothing Like It on the Market

Write for catalog.

F. Meyer & Bro. Co.
Peoria, Ill.

Robinson Crescent Furnace

FOR HARD COAL, SOFT COAL OR WOOD



Put to test last year. Its popularity has been fully demonstrated. : : :

This furnace is supplied with our CELEBRATED ECLIPSE GRATE two-piece Fire Pot, large Ashpit, Double Feed Doors and Crescent Flue Radiator.

ROBINSON FURNACE CO., 107 Lake St., CHICAGO

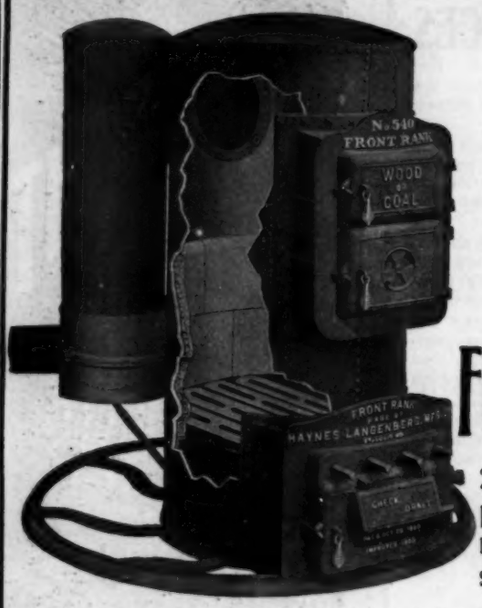
MONCRIEF
WARM AIR FURNACE

Specialties:
- All Cast Iron.
- Moncrief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE COMPANY
6-8-10 Long St., Cleveland, Ohio

Sales Agent—J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo.

THE AMERICAN ARTISAN.
Gentlemen: Please discontinue my ad. I have sold the stock and die. The first issue did the business. Yours truly, E. J. KETCHUM, West Duluth, Minn.



FRONT RANK STEEL FURNACES

20 years of experience in the manufacture of steel furnaces.

enables us to present the type shown herewith. It is the embodiment of the strongest features gained in our long experience. Ten thousand in use in St. Louis alone. Thousands in all sections of the country attest our claims of superiority. Burns hard or soft coal, wood, gas or coke.

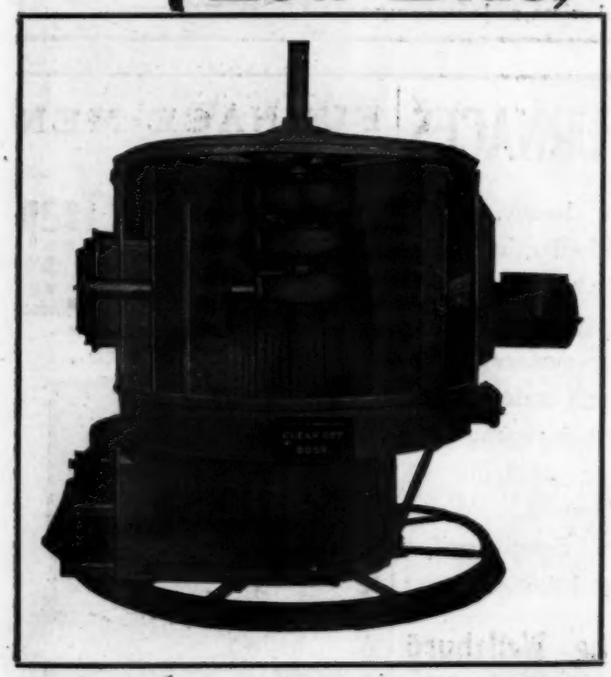
The FRONT RANK is built like a boiler, has no cast fire pots to crack or warp, nor cemented joints to leak gas.

The FRONT RANK is a very powerful heater, because it has a long vertical fire travel.

HAYNES-LANGENBERG MFG. CO., Mfrs.
ST. LOUIS, MO.

FRONT RANK STEEL FURNACES AND HEATING SUPPLIES.

Low Bids,—and High Bids



It's a common fallacy nowadays that you must be the low bidder to land a furnace job.

Perhaps you're a furnace man who thinks there's no fallacy about it,—that's it just a hard, cold fact.

You really need the Exclusive Agency for the KELSEY Warm Air Generator.

You will find you have wasted your energy in the past pushing a furnace in hot competition, and at the end of the year barely coming out even.

With the KELSEY it's different.

The KELSEY appeals to people who want the best,—who are willing to pay for the best,—in other words, the best class of people in your community.

KELSEY agents frequently secure contracts for heating buildings with the KELSEY Generator where the contract had practically been awarded to some Steam or Hot Water System.

If you are anxious to get away from old-fashioned no-profit methods, ask for the KELSEY Agency Proposition.

"There's Only ONE Warm Air Generator!"

Kelsey Heating Co., Syracuse, N. Y.

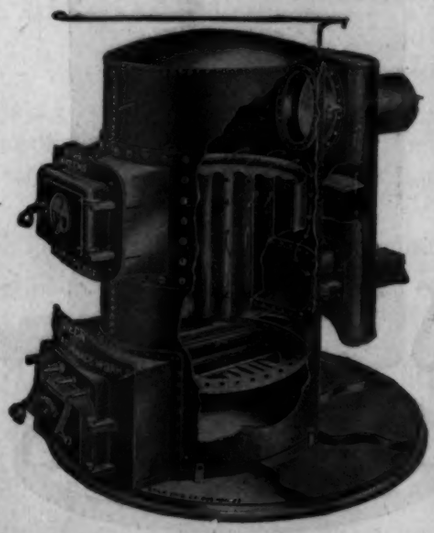
New York City:
186 FIFTH AVENUE

Philadelphia:
Builders' Exchange, 24 S. 7th St.

JAMES SMART MFG. CO., Brockville, Ont.
Sole Makers for Canada.

Western Sales Agents:
COOK & VAN EVERA COMPANY
38 East Lake Street, CHICAGO

IN CHOOSING A LINE OF FURNACES



to sell to your trade there are a few things of prime importance to consider.

In the first place there must be no question about the furnace giving satisfaction to your customers. They must be no experiment.

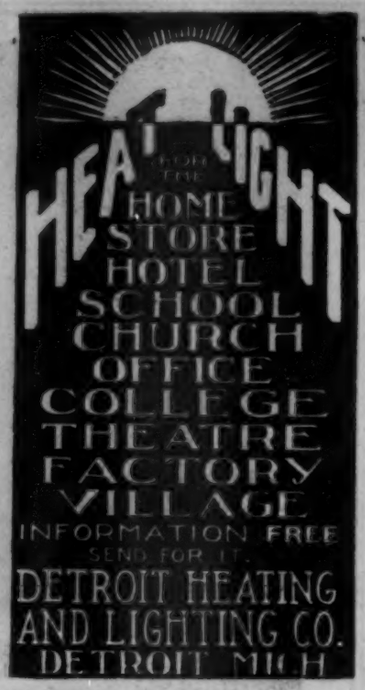
Then you should be able to get them promptly in the rush season, when a few days delay may mean the loss of a job.

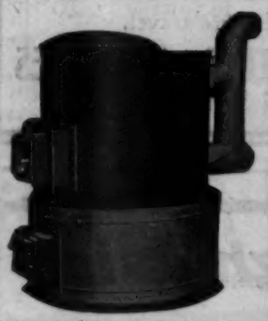
You should not pay big freight charges from some eastern point when you can beat both the goods and prices nearer at home.

You should, if possible, buy the entire material for the job from one house at one shipment.

You should remember that if you sell Green Furnaces you will have all these advantages. It pays to have our agency.

GREEN FOUNDRY AND FURNACE WORKS, DES MOINES, IOWA.





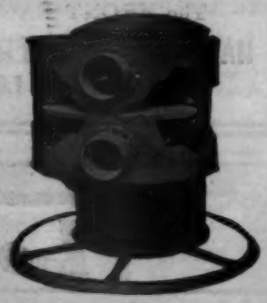
The Modern Steel Furnace

Manufactured by

WM. U. KOONS, DANVILLE, ILL.

This furnace is made of very heavy steel and well built throughout.

Write for catalogue and prices, and secure agency.



THE "X.L.O." WARM AIR FURNACES

are heavy, plain and effective. No "clean outs." Grate and Radiating surface large. Been under severe test 5 years. Catalog explains all about it. Write us. Special prices for 1905.

The Wellsburg Heating & Foundry Co.,
Wellsburg, W. Va.

FURNACE MEN

THE

Perfection Dust Trap and Ventilator

Catches all the Dust and Ventilates the House.

Increases your business and satisfies your customers.

Can be attached to any furnace.

For particulars write

DAVIS & WALCOTT
Manufacturers, ATCHISON, KANSAS

One or Two POINTS

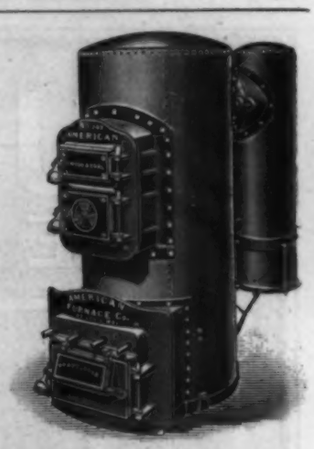
FOR THE FALL SEASON

Boiler plate furnaces don't crack. Curved surfaces are non-buckling. Smooth walls do not accummulate dust.

Fire pots cast in one piece don't crack. That is why our furnaces sell.

Write for Catalog

AMERICAN FURNACE CO., St. Louis, Mo.



The Radiators of the Jahant Hot Blast Furnaces

STEEL PLATE RADIATOR

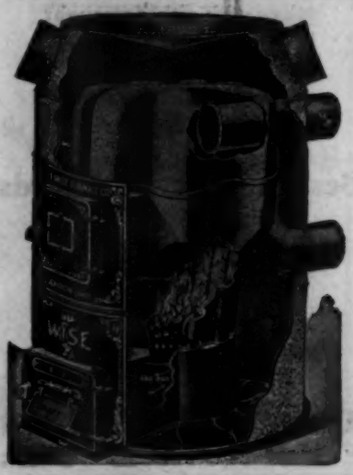
are constructed scientifically in every respect. They are furnished with large radiating surface and are constructed to endure all the strain they are subject to.

Our Steel Plate Radiator is made with sides of cold rolled steel plate, and top and bottom of cast iron. The dome is cast in one section, extra heavy, in such a manner that expansion and contraction do not affect the connecting cup joint at the combustion chamber dome.

Our Cast Radiator consists of one piece, and so all danger of cracking by expansion and contraction is entirely obviated. For complete description of furnace and testimonials from many users, **SEE OUR CATALOG.**

Rohrbacher & Allen, Akron, O.

CAST IRON RADIATOR



The Wise Furnaces

They don't smoke. They don't puff.
They don't warp. They don't crack.
They don't give any dust.
They don't waste any fuel.
They are not particular whether you feed them with soft or hard coal, wood, lignite or waste paper.
They are raised and educated by

The Wise Furnace Co.

Akron, Ohio

Who will modestly explain to you how they do the great things when you write for a catalog.

Teachers and Preachers

WILL FIND OUR FURNACES

JUST WHAT THEY WANT

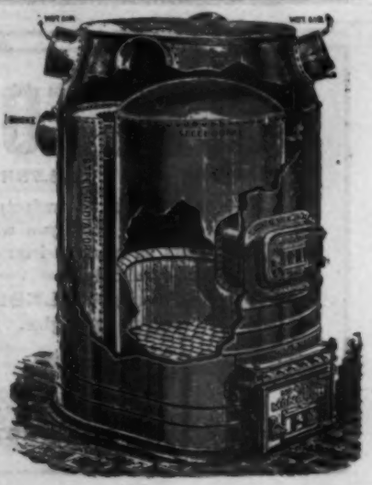
for a public building, as in no other make has such a study been made of ventilation, genial heating and thorough efficiency as in those

Made By Us

KRUSE & DEWENTER

427-429 E. Washington St., Indianapolis, Ind.

Our Catalog will give the comfort seekers many points.



MUELLER HEATERS

PAY FOR THEMSELVES HOW? ASK US.

40000 IN USE

L. J. MUELLER FURNACE CO.

WRITE FOR CATALOGUE - MILWAUKEE -

THE LION COMBINATION FURNACE

FOR GAS OR COAL

Made with either wrought iron or cast iron radiator. Our wrought iron radiator is made from double puddled wrought iron, the

Best the Market Affords

and will last three times as long as sheet steel. The radiaior is self-cleaning, and absolutely dust and gas proof.

THE YOUNGSTOWN FURNACE CO.

Youngstown, Ohio

Perfect Blast Device

Clinker Punch
Big Tubular Radiator
Secondary Radiator
Burns Soft Coal or Gas and can be changed quickly

THE BONNOT COMPANY, Canton, Ohio

Makers of GOOD Furnaces

ASBESTOS FURNACE CEMENT.

BUY ONLY COLEBROOK'S ASBESTOS FURNACE CEMENT AND STOVE PUTTY.

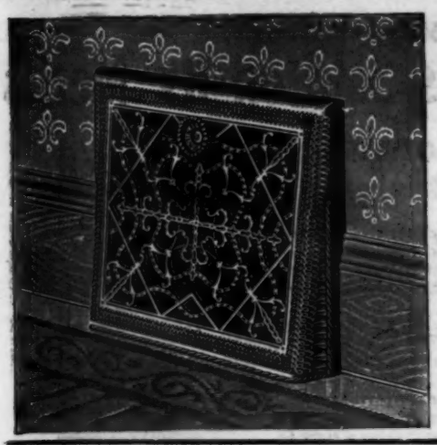
Best that can be manufactured and quality tells. If we please you tell others; if we don't, tell us. All we want to know is what you want and we can fill the bill. **COLEBROOK'S ASBESTOS FURNACE CEMENT** gets as hard as iron and no heat can destroy the same. Put up in all size removable cover cans, tubs, bbls. and half-bbls.

Insist on having **COLEBROOK'S ASBESTOS FURNACE CEMENT** and **STOVE PUTTY** and you will not have to apologize. Samples for the asking. Manufactured only by

W. H. COLEBROOK & SONS,

SYRACUSE, N. Y., U. S. A.

LARGEST MANUFACTURERS OF ASBESTOS FURNACE CEMENT IN THE WORLD.



WHY DON'T YOU GET THE BEST?

Stowell Side Wall Registers

Furnished Either With or Without Boxes

BOXES furnished with tin strips on sides by which they can be readily fastened to wall and to Register. The box is furnished with a collar for stack extension or with solid top and is made for first and second floor as well as two registers in opposite rooms or double headers. Full line Floor Registers and Boots. Send for new Catalogue D.

Stowell Mfg. & Foundry Co.

51-73 Milwaukee Ave., SOUTH MILWAUKEE, WIS.

"T & B" REGISTERS

The Old Reliable
The Standard of Comparison

If you want registers **QUICK** remember that our stock, of the best registers made, now consists of **600,000** pieces.

Tuttle & Bailey Manufacturing Company

ESTABLISHED 1846

NEW YORK CHICAGO BOSTON BROOKLYN

PERFECTION OF SIMPLICITY

CHARACTERIZES

THE CHASSE Mouse Traps

Easy to Set
Easy to Bait
Easy to Sell

Works neatly and unfailingly.

Sure to allure and hold the victim.

Patented U. S. and Canada '02.

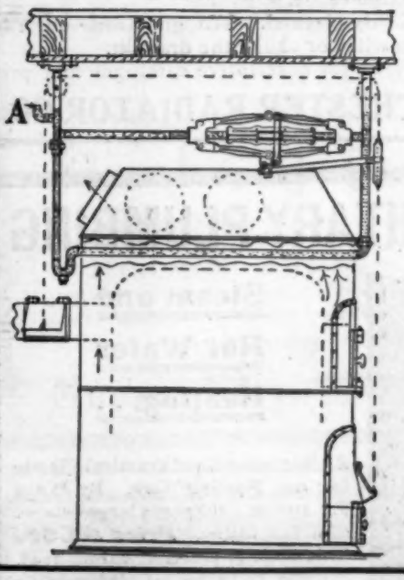
MADE BY

CHASSE MANUFACTURING CO.

Main Office: NEW YORK, N. Y. Factory: MIDDLETOWN, N. Y.

LAWLER'S THERMOSTATIC REGULATOR

FOR HOT AIR FURNACES.



This illustration shows a Lawler Regulator applied to a hot air furnace for automatically controlling the furnace heat to any desired temperature.

It is the most perfect machine for the purpose in the world.

Good reliable furnace men in every city, wanted to handle this furnace Regulator.

LAWLER REGULATOR CO.

158 Wooster St., NEW YORK CITY.

Our Western Agents:

THE NORWALL MFG. CO.,

138 Jackson Boulevard, CHICAGO, ILL.

SOME MORE BOOKS

A series of practical volumes with numerous illustrations.

"*Practical Draughtsman's Work*," 226 illustrations. This one contains many points relative to this line of work. $1.00 prepaid.

"*Practical Gas Fitting*," 120 illustrations. This one contains all practical points connected with gas fitting of every description. $1.00 prepaid.

"*Practical Stair Case Joinery*," 215 illustrations. This one contains many beneficial points for the practical workman as well as good hints for the amateur. $1.00 prepaid.

"*Practical Metal Plate Work*," 247 illustrations. This one contains numerous engravings and diagrams, and is unusually clear and true. $1.00 prepaid.

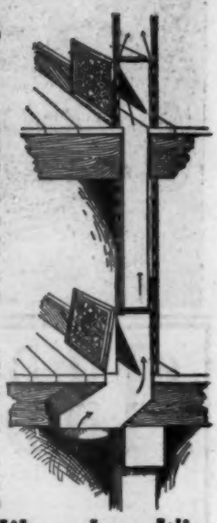
Any of these books and all others of any line can be secured upon receipt of price, prepaid by addressing

DANIEL STERN, 69 Dearborn St., Chicago, Ill.

Some goods are sold by bluffing

The Schwab Side Wall Register is Sold on Its Merits

Original in Construction, Artistic in Design.



This register is the neatest design of any on the market. This register being made of cast iron has a straight, smooth surface on the edge making it easy to fit the base board against the same and to remove the face at any time thereafter when it is desired.

The No. H, single faced register has a collar to the register box 7x13¼" inside full measurement. The No. T, double faced register box has a collar 9⅝x15¼" inside full measurement. These measurements are larger than are actually furnished by any other manufacturer sending register box with the register. This register is made with a flange within which to fit the register box making a tight fit.

The box and register are sent separate and adjustable.

Registers are made full size published.

This register is one of the factors of a Modern System of Heating residences by a radical change in the installation adopted and practiced by us more than by all others combined.

Safe delivery and durability guaranteed. Goods sold only to the hardware trade.

Send for ou booklet, "Modern Methods of Heating Residences" or plan for heating residences under this system furnished free on application and results guaranteed by the

R. J. SCHWAB & SONS CO., The Furnace Men, Milwaukee, Wis.

SAVE HALF YOUR FUEL

by using the

ROCHESTER RADIATOR

The Part that Does the Business

Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
For Hard or Soft Coal, Wood or Gas.
Price from $2.00 to $12.00.

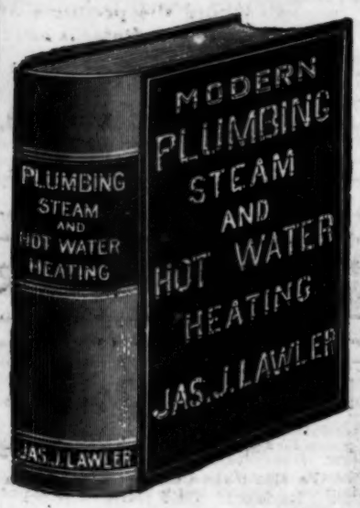
One square inch of radiating surface directly over the hot current is better than six in a drum or side heater with perpendicular tubes.

Easily cleaned. We guarantee our radiators not to interfere with, or choke the draught.

Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO. 120 Furnace Street ROCHESTER, N.Y

MODERN SANITARY PLUMBING



Steam and Hot Water Heating...

An Encyclopedia of Practical Plumbing and Heating Work. By JAMES J. LAWLER. 400 pages large octavo. Size 6x9 inches. ***Price $5.00.*** This book is practical throughout. Its aim is to impart information that practical men can utilize in earning their daily bread and butter. It is the ready key to problems arising in sanitary and heating work, and has already taken its place as a leading practical authority in this field.

FOR SALE BY

DANIEL STERN, - 69 Dearborn Street, - CHICAGO.

The "Manest"

COMBINATION

Coal and Gas

Furnace

Can be used in connection with old or new furnaces.

AGENTS WANTED

THE MANNEN & ESTERLY CO.

Cleveland, Ohio

SOLE MANUFACTURERS

Ha-Ha-Ha!

WE DO NOT SELL TO CATALOGUE HOUSES.

The Jones side-wall Registers are the best

BECAUSE:—

THEY VENTILATE. OTHERS DO NOT.

Because:—

They have greater capacity than others.

They are more durable, and cannot break like the cast register fronts do.

They are neater in design and more finely finished than others.

The front is fitted to the body of the register, which prevents leakage, which is so objectionable in side-wall registers where the front fastens to the wall and not to the body of the register.

They are noiseless and do not rattle when being adjusted.

They have double metal register boxes included with each register, with a ventilating space between the inner and outer casing, the ONLY side-wall with a VENTILATOR.

They are made under the supervision of practical furnace men, who are familiar with the requirements of the trade.

OUR BOOKLET, Advanced Methods of Warm Air Heating, sent upon request.

Heating plans furnished in accordance with the JONES SYSTEM OF HEATING AND VENTILATING.

And perfect results guaranteed where Jones Registers are used.

The trade supplied by legitimate jobbers everywhere.

MANUFACTURED ONLY BY

THE UNITED STATES REGISTER CO., Ltd.

BATTLE CREEK, MICH.

Even our advertising cuts are imitated.

With Jones Registers but one-half the number of basement pipes are necessary.

A No. 15 JONES REGISTER.

For heating large first floor rooms. Bottom Collar, 7x13½. These Registers are fitted with a Top Collar which fits 3¼x12 single or No. 8 double-wall pipe when two rooms are to be heated (one above the other) from one large basement pipe and are fitted with an asbestos-lined plate when used for heating one room on the first floor.

The Horse-Shoe Radiator

Notice the dome with the outer return flue or horse-shoe radiator. It is high enough to give an extra large combustion chamber and at the same time make the furnace low enough for shallow basements. Ample space is left between the dome and the inner circle of outer radiator.

Floral City Capitol Furnace

It is heavily constructed. No flimsy or light material is used. The body and radiator are made of No. 10, No. 8 and No. 6; not No. 16 and No. 20, as most furnaces. Where the products of combustion pass from the body into the outer radiator, a solid cast iron plate instead of steel is used.

Get our latest catalog—new.

Monroe Fdry. & Furnace Co., MONROE, MICH.

The Ideal Acetylene Generators.

GET THE BEST.

Every one has given splendid satisfaction.

Can you ask for more?

There is none better.

Active agents wanted.

Address

Epworth Gas Light & Heating Co., WATERLOO, IA., U. S. A.

Mention "THE AMERICAN ARTISAN."

MUELLER WALL REGISTERS

Simple
Durable
Quickest Installed
Greatest Capacity

We also make a complete line of Floor Registers. GET OUR PRICES.

L. J. MUELLER FURNACE CO.

191 REED STREET Established 1857 **MILWAUKEE, WIS.**

We are the only Manufacturers making a line of

Heavy Cannon Stoves

With
AIR TIGHT JOINTS and HOT BLAST

Combining the necessary qualities of

GREAT DURABILITY and EFFICIENCY

With the MODERN FEATURES of

ATTRACTIVENESS
CLEANLINESS
and ECONOMY

INSURING PERFECT CONTROL OF THE FIRE and HEAT WITH COMFORT

They cost no more than the Back Numbers

Made in Three Styles
SINGLE and DOUBLE HEATERS
With or without
DRUMS and SMOKE DOMES

Write for Circular and Prices

The A. T. NYE & SON CO.

Manufacturers and Patentees

MARIETTA -:- OHIO

THERMOSTATS

SPRAGUE DAMPER & VALVE REGULATORS Non-Electric.
10 years in use. Thousands giving satisfaction; they are guaranteed; also Sprague Electrics, and automatic checks for Steam, Hot Water and Hot Air Heaters of all kinds.
HOWARD THERMO. CO., - West, Oswego, N. Y.

The Largest Best and Cheapest Oil Heater

Silver & Co.

304-314 Hewes Street
432 Broadway
BROOKLYN, N. Y.

Catalog sent on request

Reduced Railroad Rates for Merchants

The Chicago Commercial Association has secured reduced rates to Chicago for its members, merchants and manufacturers who are patrons of its members, on the dates which follow:

WESTERN PASSENGER ASSOCIATION TERRITORY

Rates of one and one-fifth fare on the certificate plan have been granted from points in Iowa, Wisconsin, Nebraska, Colorado, New Mexico, on the Atchison, Topeka and Santa Fe proper; New Mexico and Arizona on the Santa Fe Pacific; Wyoming (from Cheyenne only); also in Minnesota and North and South Dakota, except on the Soo System, and members on this line can secure the reduced rates from the nearest points on other lines; Illinois, Missouri and Kansas in Western Passenger Association Territory, and Northern Peninsula of Michigan.

Fifth Meeting—Purchasing dates, Oct. 28 to Nov. 4. Return dates, Nov. 1 to 14.

SOUTHWESTERN POINTS

Rates of one and one-fifth fare on certificate plan have been granted by the Atchison, Topeka and Santa Fe System, east of and including Arizona and New Mexico; Chicago, Rock Island and Pacific; Chicago, Rock Island and Gulf; Kansas City, Clinton and Springfield; Missouri Pacific-Iron Mountain System; St. Louis and San Francisco; Kansas City Southern; El Paso and Northeastern System; Gulf, Colorado and Santa Fe; Missouri, Kansas and Texas System; International and Great Northern, for the same dates as from Western Passenger Association territory.

CENTRAL PASSENGER ASSOCIATION TERRITORY

This is the territory east of Chicago as far as Buffalo and Pittsburg and north of the Ohio river.

Fourth Meeting—Purchasing dates, Oct. 28 to Nov. 3. Return dates. Nov. 1 to 11.

The rate from this territory will be a fare and a third for the round trip.

HOW TO OBTAIN THE RATE

Purchasers of tickets must in all cases take certificates (not a receipt) from the ticket seller at the point of starting. Upon arriving in Chicago communicate at once with THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, or with the merchant with whom you may be doing business or may desire to do business.

The certificate receipt, which the purchaser must ask for and obtain in all cases from the ticket agent when he buys his going ticket, must also be presented to the association secretary, in connection with the membership card which should be obtained from some member of the association in Chicago, who, if everything is correct, will endorse such certificate, and it will then be turned over to the joint agent of the railway companies for his endorsement. The certificate so endorsed will then permit the holder, upon presentation to the ticket agent at Chicago, of the railway lines over which the member travels, to obtain his return ticket for one-third or one-fifth the one-way fare.

To avoid delay and confusion in the rush to make trains, deposit your ticket with the secretary upon your arrival in Chicago.

Only retail merchants, manufacturers and bankers, in good standing, are entitled to the rate privilege.

SPECIAL RATES

ILLINOIS CENTRAL AND THE SOUTH

The Illinois Central will make a rate of about a fare and a third for the round trip between June 1 and Sept. 30, bearing final return limit to Oct. 31, from all points in Tennessee, Mississippi and Louisiana.

FROM THE PACIFIC COAST

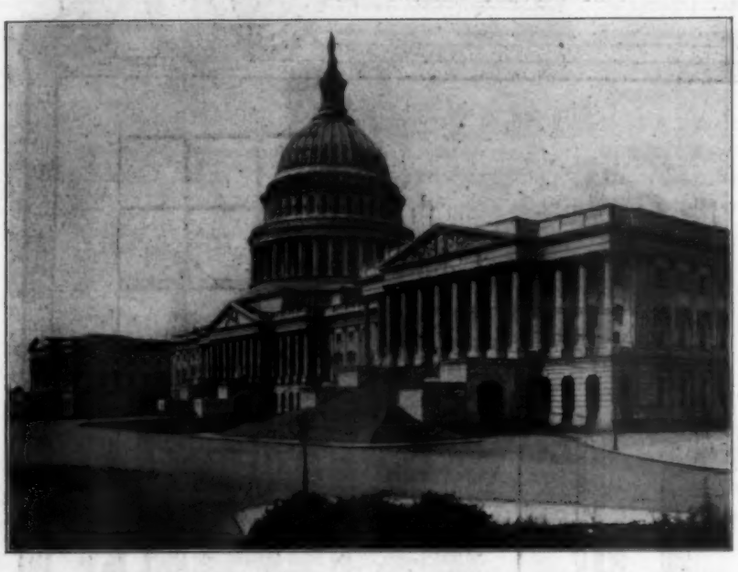
The Southern Pacific will make a rate from San Francisco, Los Angeles, Colton and Redding and intermediate points of $72.50 for the round trip to Chicago on July 4, 5, 6 and 24, 25 and 26, ensuing.

"Nothing except the mint can make money without advertising."—Gladstone.

SHORT LINES

FOR HARDWARE MEN

To Washington Convention



From ST. LOUIS
From BOSTON
From CHICAGO
From NEW YORK
From CINCINNATI

From PHILADELPHIA
From CLEVELAND
From BUFFALO
From PITTSBURG
From BALTIMORE

THE PENNSYLVANIA SHORT LINES

Western Hardware Men Have the Privilege of

EIGHT DAILY TRAINS EAST

From Chicago, with Ten Days Stop Over at Washington, Baltimore and Philadelphia

on first-class tickets to Philadelphia and New York, at same fares at which tickets are sold to those points over the direct line.

The Pioneer 18 HOUR TRAIN From Chicago to New York

Runs Every Day over the Pennsylvania Short Line

THROUGH SLEEPING CAR accommodations for any train, or further information, will be cheerfully furnished upon application to the City Ticket Office, 248 South Clark St., or by addressing

C. L. KIMBALL, Asst. G. P. A. Pennsylvania Lines, Room 22, 2 Sherman St., CHICAGO

Before you tie up or sign a contract to handle a particular furnace in 1906 suppose you look up thoroughly the furnace of quality—The good Round Oak.

QUALITY is the slogan that wins best returns in the furnace business. We will welcome the opportunity to prove it to any good furnace merchant. "Warmth and Comfort" furnace catalogue sent on request.

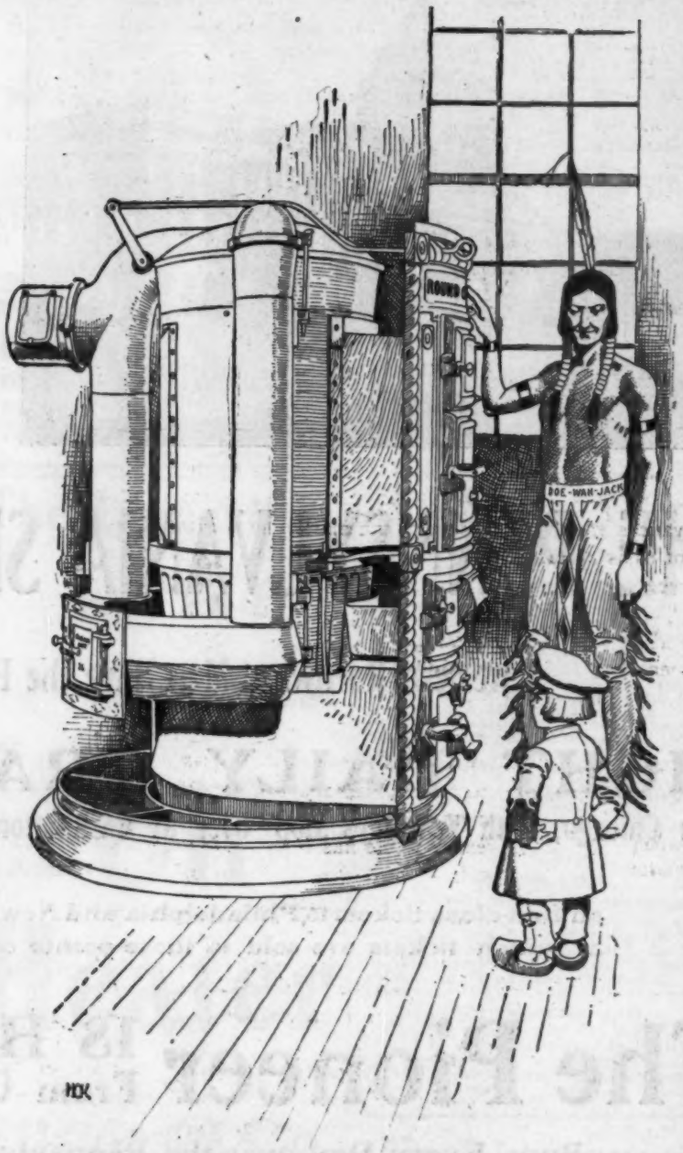
Estate of

P. D. BECKWITH

Fred E. Lee, Manager

Dowagiac Mich.

MAKERS OF GOOD GOODS ONLY



This is the Round Oak Furnace, Fritz, set up complete ready for the galvanized iron casing from which the warm air pipes are taken.

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, NOVEMBER 4, 1905.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1905 TO NEW SUBSCRIBERS FOR THE YEAR 1906. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1906.

AN ADVANCE in steel and galvanized sheets in the English markets was recorded Oct. 26th, in addition to advances which have brought the market up to its present basis of £12 5s for bundles, f. o. b. Liverpool. The recent enormous accession of orders from South America, the Cape, and India, have placed the mills in an absolutely independent position. Their output has been sold for the remainder of the present year and the first quarter of 1906.

Fruitless Attempt.

NATURE HAS laid down certain immutable laws, which some people turn to good advantage, and others of an unscientific mind attempt to reverse. Great progress has been made in the electrical, in the biological, horticultural and other worlds by accepting certain fundamental premises that scientists have discovered and utilizing them for the purposes of man. Occasionally we hear of fruitless attempts at reversing these laws or of disregarding them in an endeavor to improve conditions.

The retail grocers of the far Western states are seemingly determined to transgress nature's laws in at least one respect. They have formed an organization which publishes a semi-monthly tract called Actual Costs. This circular is being circulated among retailers throughout the states and its purpose is to publish in each issue the actual cost to the wholesale grocer of about fifty different commodities. The subscribers, the retail grocers, are asked to pay $5.00 a year for this service and are assured that by the end of one year's subscription, they will have a complete file of jobbers' costs.

It is purposed by the publishers of this paper to add stability to the trade. Under the new system, the manufacturer will find it necessary, it is claimed, to fix a price on his goods at which the jobber shall sell to the retailer. The manufacturer, being master of the situation, will be able to protect his goods against the price cutter. It is also expected that jobbers will find it desirable to curtail their profit on certain commodities on which they make more than retailers.

The objections to the scheme involve the fact that quotations on groceries constantly change and that jobbers' cost prices for one week may mean retailers' selling prices for the next week. Fluctuations in value of thirty or forty cents on a bushel of corn are by no means uncommon. Quite often these differences occur within the period of one week. Other products show similar instability. The list of jobbers' costs which the subscriber to this paper would have at the end of the year, would be of no value. Most important of all, however, is the fact that market prices are the result, not of any rigid system laid down by manufacturers and jobbers and retailers, but of nature's stringent law of supply and demand. This law operates in all mercantile pursuits and is the ultimate factor in determining value. Retail grocers, as well as hardware dealers and merchants in any other sphere of life, realize that goods are not always to be valued according to their cost price. Stoves bought in quantities during the summer or the early fall and remaining unsold throughout the winter are quite often retailed to customers at prices equal to the cost price, leaving no marginal profit whatever. The goods that have encumbered the shelves of a hardware store for some time are parted with at a price far below the cost price. On the other hand, an advance in axes, agricultural implements, wire nails and similar products will often bring about advances in the retail price on goods which were bought before jobbers' prices were advanced. In this case the retailer's margin of profit is increased, while the original cost of the goods remains fixed. The publication of this semi-monthly sheet is a fruitless attempt to substitute mortal rules and regulations for nature's laws.

A Ridiculous Scheme.

ONE of the most ridiculous schemes that has come to our attention in some time is what is called "a possible solution of the trust and labor problem." It is practiced to-day in England, and originated in Birmingham. Described in the most condensed form, the scheme is as follows: All manufacturers in some one line of production get together and bind themselves not to sell below a certain price. The employes of these different manufacturers agree not to work for any manufacturer who sells below the established price. The manufacturers are held by making the selling price on every product high enough to give them increased profits. The workmen are held together by giving them a percentage of that increased profit. A vigilant committee is ready to pounce down on any manufacturer that cuts the rates. The foundation principle of the plan is that the manufacturer

must not charge less than cost for his goods. The scheme has been worked out in the case of bedstead manufacturers, and at the present time employes in this line are receiving an advance of thirty per cent on the wages that were paid to them when the organization was formed, while prices on bedsteads have been advanced uniformly by every one of the fifty-two manufacturers in the country, all of whom belong to the combine. The method is said to be a solution of the labor and of the trust problems. Let us see how it would effect each one of these questions.

The originator of the scheme is a middle-aged man, self-educated and self-made. As is shown by the scheme he originated, he is of a socialistic turn of mind. That he is self-educated is also apparent. If the scheme is good for one industry, it is good for all, and the same arguments that call for its practice in one industry must call for its practice in all industries. We will suppose that the practice were taken up by all employers in their respective lines. All employes would receive an advance in wages of thirty per cent. The cost of the products produced in these lines would be raised thirty per cent or more, otherwise the manufacturers would get a decreased profit, and would revert to their old system of independent action. The cost of living would be thirty per cent or more higher. The gain would be nil for either employes or manufacturers. The standard of living for employes would not be raised though the value of a dollar would be less. The scheme is a flat and ridiculous failure when viewed from this standpoint.

Let us see how it would work out from the employer's end. When a trust is perpetrated on any line of industry, advertisements soon announce the fact that the cost of production has decreased because the products are manufactured in larger quantities. The argument is good. Production in immense quantities does decrease the cost. A small butcher killing two or three hogs a day could not utilize everything except the squeal as the enormous Chicago packing concerns are said to do. His two or three hogs a day would cost him more per capita than the twenty or thirty thousand hogs that daily pass through the Union Stock Yards. The outcry against American trusts is not because the cost of production is increased, because it is acknowledged universally that the cost is decreased. It is claimed by opponents of the trust idea that by combining all of the different manufacturing concerns in one industry into one manufacturing concern the margin of profit for manufacturer can be increased almost limitlessly without any consideration to the purchaser.

It will be noted that the hair-brained enthusiast at Birmingham, England, carefully picked out all of the evils of the trust policy, as they are revealed to the American public, and neglected to garner any of the virtues. The scheme mentioned by no means decreases the cost of production, for the advanced wages to be paid to the employes would naturally increase it about thirty per cent and production would be carried on at the several establishments as before the agreement. The worst evil connected with trusts and the only one of which we are aware, is the ability to fix prices arbitrarily. This evil is conserved in the Birmingham scheme.

While the scheme is ridiculous, we believe that it is just as futile. All gentlemanly price agreements have been comparatively unsuccessful in the past and undoubtedly will be in the future. The parties to the combination will not hold to their agreements. A reduction of twenty-five cents a ton on pig iron will, let us suppose, get an order for fifty thousand tons. There are few furnace interests who would refuse to listen to the tempter. But our worthy friend at Birmingham has provided for this contingency. The employes are bound not to work for a manufacturer who sells below the established price and a vigilant committee pounces upon every employer who cuts the rates. Let us suppose an actual instance of how reductions in rate may be granted in spite of these precautionary measures. Faithless Tom & Company, Limited, of Birmingham, England, are the manufacturers of bedsteads. They are after the trade of a large retailing concern in London. The secretary of the manufacturing company, which is a party to an agreement of the kind described, in which are included all of the manufacturers in their line, visits the London retailer and solicits his patronage.

"But we are getting good service at present," declares the buyer of the retail concern. "The material going into the construction of the bedsteads that we sell is of the best quality and you certainly cannot give us better quotations, as you are a party to the agreement."

The secretary asks for the opportunity. He is given a trial order. He ships the goods at the regular prescribed quotation. A week after the order has been shipped, he again appears at the buyer's office and without saying a word deposits a bunch of greenbacks on the buyer's desk in the form of a rebate. Not a word is said; no receipt is given; but the price is cut and no one's the wiser.

A policy of this kind would either break up the combination or would so flood a few manufacturing plants with orders that they could afford to be satisfied with a profit of five instead of twenty per cent and still pay their employes a thirty per cent advance in wages.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

A certain school of philosophers hold forth as the highest aim of man the perfection of all the different attributes going into his make-up—the perfection of the physical, mental and moral man. Hist how the first can be accomplished. I quote from *Batten's Wedge.*

BUSINESS CHANCE.

By Frank Roe Batchelder in the *Smart Set.*

What wondrous things they advertise
  To do for mortal man!
They furnish artificial eyes
  On the instalment plan:
They grow new hair upon your dome,
  Remove it from your lip,
And give your nose that came from Rome
  A perfect Grecian tip.

The mole that makes its victim shun
  The low-necked evening waist

They charm away, enabling one
  To show her shoulders chaste;
The bulging ears by Nature cast
  From sugar-scoop designs,
When trimmed and trussed, attain at last
  To purely classic lines.

They clarify the sallow skin
  Until the blushes show,
Or tuck a dimple in your chin,
  At rates extremely low.
Of slender figure carved from stout,
  Or bandy legs made straight,
Or wrinkles wholly put to rout,
  The list is adequate.

But what we really need is not
  To make short people tall,
Nor cures for moth and freckle-spot
  Within the reach of all.
For some smooth genius yet to come
  An opening still remains:
To fill the cranial vacuum
  With well-assorted brains.

One of the three factors eliminated! I thought of the resourceful Sheldon of the salesmanship school. "Can you dispose of a second?" I asked. "I will," he cried, "I'll make man perfect mentally," and he penned the following lines:

SHELDON TAKES IT UP.

Dedicated to *Batten's Wedge.*

Just now the kindly fates decreed
  That our nomadic glance,
Should rest upon the lyric screed
  Entitled "Business Chance,"
In which Herr Batchelder relates
  With vast poetic pains,
The crying need in "smart set" pates,
  for *quantum suff.* of brains.

He mentions in his tale of woe
  That artists, not a few,
Can patch a man from crown to toe
  And make him just like new;
They raise him crops of teeth or hair,
  Where not a stump remains,
And yet with all their skill and care
  They can't restore his brains.

On this he worries like the deuce
  That soon the day must come
When skulls shall have their only use
  As cloaks to vac-u-um,
Unless some genius finds a plant
  Whose bark or root contains
A stuff to fill the long felt want
  For supplemental brains.

But now this bard his wings may fold
  And walk around the block,
For A. F. Sheldon claims to hold,
  That very thing in stock;
And if those "smarties" know but how
  To shelter when it rains,
He'll take the contract here and now
  To load them up with brains.

He further claims his dope is kind
  If patients toe the mark,
But sweeps through body, soul and mind
  To fan their native spark,
And when on Business Science fed,
  Each faculty attains
Its normal growth—why, then, the head
  Will bulge right out with brains.

I was talking with a veteran Chicago hardware dealer the other day. "No," he said, "the department stores don't worry me very much. I can offer equal or better prices on most kinds of hardware. People usually need hardware in a hurry and they don't care about traveling three miles to get it. Women customers are apt to trade at department stores more than men. One woman let the secret out about a year ago. She came in the store and asked for a food chopper. I showed her a good one and gave her the price. About a week later she dropped in again. I brought up the food chopper and she said she had gotten it at one of the big department stores, mentioning the price. The figure was a trifle higher than mine and the chopper exactly the same. 'But it cost you twenty-three cents more,' I said, 'besides the carfare and time.' 'Yes, I know,' she replied, 'but then, you know, I like to buy down-town. It's so much more exciting.'"

The novelty of buying in a large store and in a large city appeals as much to farmers' wives as to the wives of city inhabitants—perhaps more so. I believe that this feeling, this desire to experience the novel, is indirectly responsible for almost a fourth of the catalogue house trade. The farmer's wife tires of the local business houses. She longs for a change. She wants to "dress like city folks," to heat her house like city folks. She writes for a catalogue or reads the one sent and this feeling, plus the insistence of the catalogue house correspondents, results in the order.

Of course the idea is based upon a fallacy. The retail catalogue houses profit by human frailty. But the local dealer must circumvent this passion. Dolly off the farm should be taught that the latest fashions in head dress are to be found at the retail store, not in the catalogues of the mail order houses. There should be no question but what the local dealer handles the very latest in stove construction. The passion for the novel may be gratified by the local dealer in numerous ways. Window displays, steel range drawing contests, well conducted newspaper and circular advertising, a handsome delivery wagon with uniformed men in charge, and a tandem of horses, a cozy corner in the store with files of cosmopolitan newspapers, a small stock of the latest gimcracks, etc., etc.

It is well for the dealer to remember that the impetuous character of the American people continually calls for something original. A conservative policy may be maintained, but I strongly urge that it include such features as will tend to create the impression that the world circles around the local store and not that the retail catalogue houses lead in progressiveness, with the dealer far in the rear.

* * *

A comparatively new method for filing saws is to take a cut-off saw, No. 6 or 7, and file it square across with the file level. Then start on the back corner of the tooth one-third or one-half way down and file it to a point on the set side. This gives it a bevel point but leaves the face square. Rip saws may be filed in the same way, only a little more time is required. This method is said to be superior and very effective if the timber to be cut is curly or knotty.

News Siftings

MEETINGS.

National Hardware Association—Washington, D. C., November 8, 9, 10. Headquarters, Arlington and Shoreham hotels.

American Hardware Manufacturers' Association—Washington, D. C., November 8, 9, 10. Headquarters, the New Willard.

National Founders' Association—New York City, November 15, 16. Headquarters, Hotel Astor.

American Society of Heating and Ventilating Engineers—New York City, January 16, 17, 18. Headquarters, 12 West Thirty-first street.

Retail Dealers' Hardware and Implement Association of Texas—Dallas, January 23, 24, 25.

Wisconsin Retail Hardware Association — Milwaukee, February 7, 8. Headquarters, West Side Turn Hall.

Nebraska Retail Hardware Dealers' Association—Lincoln, February 13, 14.

Indiana Retail Hardware Association—Indianapolis, February 13, 14, 15. Headquarters, Tomlinson Hall.

Iowa Retail Hardware Dealers' Association—Des Moines, February 14, 15, 16.

Illinois Retail Hardware Association—Chicago, February 20, 21, 22. Headquarters, First Regiment Armory.

Ohio Hardware Association—Canton, February 27, 28, March 1.

Southern Hardware Jobbers' Association—Hot Springs, Va., June 12, 13, 14, 15. Headquarters, the New Homestead.

American Hardware Manufacturers' Association—Hot Springs, Va., June 12, 13, 14, 15. Headquarters, The New Homestead.

Michigan Retail Hardware Association—Detroit, August 8, 9.

The New York office of the S. Obermayer Company of Cincinnati, recently secured a contract for the complete equipment of a brass foundry to be installed for the fire department of the former city.

"A reminder—that's all," comes from F. M. Borden & Brother, Philadelphia, who announce that they are the pioneers in stove repairs. The reminder is in the nature of a small blotter, a light gray in color with blue ink. The combination is effective.

Henry W. Crabbe, Leonard Elliott and Guido C. Hinchman, all of Dover, N. J., are the incorporators of the R. C. Bartley Company, Bartley, N. J., incorporated with a capital stock of $150,000, to manufacture stoves, ranges, steam and hot water heaters.

While it has been decided that an increase to the manufacturing plant of the Glazier Stove Company, Chelsea, Mich., is undoubtedly necessary, there is considerable difference of opinion as to whether this addition is to be located at Chelsea or at Detroit. Whatever the decision, the addition will be a large one and will help the company greatly in supplying requirements in a prompt and satisfactory manner.

Pickands-Mather & Company of Toledo, Ohio, are about to begin work immediately on a new blast furnace and coke oven to be added to their plant. The capacity of their present furnace is 350 tons. This will be increased to 700 tons. The new coke oven will have a capacity of 400 tons a day. The new furnace is to be a duplicate of the one now in operation, which was completed in May, 1903. It will be accessible to the large lake craft.

The ninth annual convention of the National Founders' Association will be held at the Hotel Astor, New York City, Nov. 15th and 16th. It promises to be one of the most important in the history of the association. Papers will be read and discussed on the education of apprentices, on how to obtain the best results with molding machines, and kindred topics. The secretary is F. W. Hutchings, of Detroit, Michigan. The association was organized in 1898.

John Berger, the enterprising stove salesman, Mansfield, Ohio, has just returned from a trip during the course of which he visited his mother in Switzerland. Mr. Berger announces that his state of mental and physical equipose was seriously disturbed while crossing the English Channel, but that upon arriving in New York Harbor a few days later his system completely adjusted itself. Baxter stoves and ranges and Detroit gasoline stoves are two of the specialties that have made thousands of friends for Mr. Berger.

The Stove Salesman's Review for October, contains the announcement that on Nov. 13th, 14th, 15th, 16th and 20th, a benefit for the Stove Salesmen's Association of Pennsylvania, will be held at the Chestnut Street Theater, Philadelphia. Much interest is being manifested in the event and a number of tickets have been disposed of. The "Hart Tree" is the title of the production and McIntyre and Heath will be the principles. The show has been running for several weeks in New York City and a reliable newspaper recently announced that "it is one of the biggest hits of Broadway and certainly gives full value."

Peter B. Acker, the well-known ex-president of the National Association of stove manufacturers and the head of the Union Stove Works, 70 Beekman street, New York city, is seriously ill at his summer home in Peekskill, N. Y. It is understood, however, that he is now convalescing and that the serious stage of his trouble has been passed successfully. He left his place of business Oct. 2d for Peekskill, complaining of a slight indisposition. This affection afterwards developed into bronchial-pneumonia. Mr. Acker's strong constitution and firm will power enabled him to conquer the trouble and he will soon be at his accustomed work. Mr. Acker's position in the stove trade is secure. As president of the National Association of Stove Manufacturers, he has made many friends, many who would have been greatly pleased had he decided to accept a re-election.

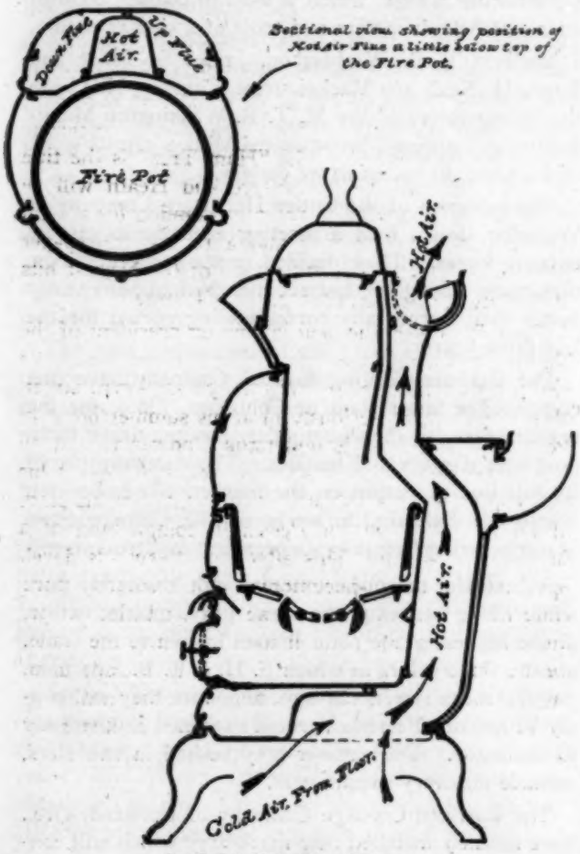
A series of blotters recently issued by the Galusha Stove Company of Rochester, N. Y., are of more than usual interest. The experiences of Joss Hayseed in the city with an astute wily newsboy, with a card shark, with a green goods man, with a speculator in gold bricks, are only exceeded in wit and ingenuity by a series of cartoons displaying Weary Walker on the golf links at Atlantic City, on the tennis court, and as Willie off the yacht. The eye for the beautiful will be gratified by a divine creation in low neck and the shortest of dresses, entitled Azalea. Those who prefer the brunette type, will appreciate a grisette, entitled Tulip. The American beauty is associated

with a dashing pippin, displaying a well turned ankle, chic and beauty. While we are not disposed to associate chrysanthemum with any great degree of vivacity, the artist is of a different opinion and has crowned this flower with a most sprightly maiden, mincing her steps to the Highland Fling.

ART SAINT CLAIR.

The Belleville Stove Works of Belleville, Ill., have succeeded in producing an effective base burner, named the Art Saint Clair. The construction of the flues is shown in the accompanying illustration. It will be noted that the cold air is taken from the floor and passed out at the top near the back of the stove, ascending thence to the ceiling, across to the other side of the room, down to the floor and then back to the stove, producing a continuous system of warmth and circulation.

The stove is fitted with a large self-feed attachment, is massive in appearance, and, while possessing a number of ingenious features, is durable. The large deflector top is removable. A gas tight automatic



Art Saint Clair Base Burner.

cover is provided over the magazine. The grates are duplex with a shaking ring and arranged to burn either coal or coke. The fire pots are thirteen-inch, fourteen and one-half inch and sixteen inch.

John Kontny of 65 and 67 North Desplaines St. is agent for Northern Illinois, Wisconsin and Minnesota. Either Mr. Kontny or the Belleville Stove Works will be pleased to furnish additional information upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

ONE EVERY MINUTE.

The Mexican with his Spanish blood, his cigarette, his unprogressiveness, his quest for pleasure rather than for work, cries "Manana" (to-morrow). Americans are inclined to cry "To-day," and while we hear from some humoristic sources, "do not do to-day what you can put off until to-morrow," the maxim is reversed for serious purpose and the example of Benjamin Franklin followed.

The H. Adler Company, Incorporated, of Carnegie, Pa., recognize the seriousness of business and caution the dealer not to wait until Manana gives the other fellow an opportunity. A stove a minute, packed for shipment, gives an idea of their capacity. These stoves are manufactured to-day, were yesterday and will be to-morrow, but the manufacturing is not put off.

Acme gas stoves, ranges and cookers, ovens and hot plates, are products of the house of Adler. The stoves are fully described in catalogue number forty-two. New and handsome designs have been added for this season's trade, including several new heating stoves and more than twenty new styles and sizes of gas ranges. Acme gas stoves for heating purposes are made in every conceivable style for natural and artificial gas. They are made in the radiator type, in the ordinary stove type, as a reflector, as a grate, as a closed heater and other designs.

The Royal Acme gas range is made with a high oven and a broiler. This and the lower oven are made with cast frames. Both ovens can be used for baking. Acme gas ranges are made with a warming oven and high back or without either, with or without broilers, with a water warming attachment or without, in plain or fanciful design.

The H. Adler Company, Incorporated, will be pleased to send additional information to dealers requesting same. When writing, kindly add, "Saw it in THE AMERICAN ARTISAN."

TRADING STAMP LAWFUL.

The Supreme Court of California has declared the anti-trading stamp law, passed by the legislature last winter, unconstitutional and void.

The opinion of the court was written by Justice McFarland. It says:

> We see nothing in such a stamp or coupon which is out side of the constitutional rights of citizens to make contracts concerning property; nothing which wrongfully interferes with the lawful rights of other persons, and nothing which the police power can reach as touching the public safety, the public health or the public morals. Of course, contracts containing lotteries, advantages dependent upon chance or any kind of gambling scheme, may be regulated or suppressed. But a trading coupon has none of these characteristics. It is not a lottery; its redemption does not depend upon chance, and it has no element of gambling of any kind. Its holder selects what goods he wants—he is not compelled to take what chance may give him or to get nothing if the throw of the dice or the event of some other gambling device shall so determine. It is, therefore, a contract, which, under the principles above stated, the legislature has no constitutional power to prohibit or to seriously interfere with under the guise of regulation; and as the act in question undertakes to do this, it is unconstitutional and void.
>
> Indeed, an ordinary trading stamp or coupon is in substance a mere form of allowing discounts on cash payments, and its issuance is entirely harmless and within the constitutional right of contract.

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., C. W. Asbury, Philadelphia, Pa.; Geo. W. Corbin, New Britain, Conn.: Henry B. Lupton, Pittsburgh, Pa.
Sec.-Treas., F. D. Mitchell, 309 Broadway, New York.
Ex. Com., W. M. Taussig, New York; Sam'l Disston, Philadelphia; Wm. H. Hays, Pittsburgh; John E. Harbster, Reading; Geo. P. Hart, New Britain; W. M. Pratt, Greenfield, Mass.; E. G. Buckwell, Cleveland; E. B. Pike, Pike, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., T. B. Stewart, Newport.
1st V.-P., R. P. Allen, Van Buren.
2d V.-P., W. E. Dean, Portland.
Sec. Treas., C. E. Taylor, Little Rock.
Ex. Com. (till June, 1907), Hamp Williams, Hot Springs; R. F. Rays, Russellville; J. P. Simpson, Malvern; J. R. Mott, Helena; (till June, 1906), Frank B. Gregg Little Rock; C. T. Rosenthal, Batesville; M. Pittman, Prescott.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., W. B. Costello.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Illinois Retail Hdw. Dealers' Assn.
Pres., Frank B. McKenney, Rockford.
V.-P., F. Giessing, E. St. Louis.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Frank B. McKenney, Rockford. L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Chas. Johnson, Peoria; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia; L. D. Ray, Belvidere; W. T. Gormley, Chicago.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Indiana Retail Hdw. Dealers' Assn.
Pres., A. N. Shidler, South Bend.
1st V.-P., Chas. Frame, North Manchester.
2nd V.-P., Walter B. Creed, New Albany.
Sec.-Treas., M. L. Corey, Argos.
Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland

The Inland Empire Implement and Hardware Dealers' Association.
Pres., C. L. Butterfield, Moscow, Idaho.
1st V.-P., E. E. Lucas, Davenport, Wash.
2d V.-P., Dana Child, Spokane, Wash.
Sec., E. W. Evenson, Spokane, Wash.
Treas., J. A. Fridaker, Spokane, Wash.

Iowa Retail Hdw. Dealers' Assn.
Pres., H. S. Vincent, Ft. Dodge.
V.-P., C. E. Haas, LeMars.
Sec.-Treas., A. R. Sale, Mason City.
Directors, T. A. Nichols, Burlington; D. S. Stouffer, Iowa City; E. C. Moore, Waverly; S. R. Mills, Mason City; U. S. Johnston, Tama; R. J. Breckenridge; Brooklyn; L. C. Clifford, Des Moines; F. P. Bollinger, Alton; W. J. Langfitt, Harlan.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C Frederick, Owensboro.
1st V.-P., U. S. Shacklett, Fulton.
2nd V.-P., George W. Buck, Louisville.
Treas., J. Steitler, Owensboro.
Sec., John R. Sower, Frankfort.

Michigan Hardware Association.
Pres., J. H. Whitney, Merrill.
V.-P., E. B. Standart, Holland.
Treas., Henry C. Weber, Detroit.
Sec., Austin J. Scott, Marine City.
Ex-Com., S. Winchester, Jackson; J. G. Patterson, Detroit; E B. Standart, Holland; E. S. Roe, Buchanan: John Popp, Saginaw; J. B. Sperry, Port Huron; C. M. Alden, Grand Rapids; J. H. Murray, Cadillac; George P. Griffin, Albion; T. Frank Ireland, Belding.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., H. R. Schroeder, St. Paul.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; F. W. Lucas, Litchfield; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester.

Missouri Retail Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., Wm. H. Hahn, St. Louis.
Sec.-Treas., Frederick Neudorff, St. Joseph.
Ex. Com., F. A. Kannsteiner, St. Louis; W. C. Shoop, Richmond; O. W. Johnston, Marshall.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
Vice-Pres., John C. Koch, Milwaukee.
2nd Vice-Pres., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., R. M. Dudley, Nashville; W. S. Wright, Omaha; W. D. Taylor, Cleveland; F. Barker, Elmira, N. Y; J. D. Moore, Birmingham, Ala; P. B. Strauss, Boston.

National Retail Hdw. Association.
Pres., W. P. Bogardus, Mt. Vernon, Ohio.
1st V.-P., E. M. Bush, Evansville, Ind.
2d V.-P., H. F. Emery, Fargo, N.D.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; S. R. Miles, Mason City, Ia.; A. H. Abbe, New Britain, Conn.; Frank A. Bare, Mansfield, O; C. H. Williams, Streator, Ill.

Nebraska Retail Hdw. Dealers' Asn.
Pres., Max Uhlig, Holdrege.
1st V.-P., Albert Degner, Norfolk
2d V.-P., Frank Haecker, Friend.
3d V.-P., M. A. Hargleroad, Holstein.
Sec., J. Frank Barr, Lincoln.
Treas., H. J. Hall, Lincoln.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V. P., Martin Jacobson, Minot.
2d V.-P., H. H. Walters, Casselton.
3rd V.-P., O. I. Butler.
Sec., C. N. Barnes, Grand Forks.
Treas., H. T. Helgesen Milton.
Members Ex. Com., W. R. McIntosh, Bottineau; E. E. Elliott, Sanborn; W. H Pinkerton, Lakota.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., A. L. Shearer, Dayton.
Treas., L. F. Stahler, Waverly.
Ex. Com., John Kramer, Dayton; C. W. Jewell, Utica; W. S Perry, Zanesville; Frank W. Ingalls, Byran Will M. Crumrine, Salem; A. Boebinger, Cincinnati; John Spoerl, Hamilton; W. F. Jacobs, Youngstown.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. V. Thompson, Mt. Jewett.
V.-P., J. H. Bowers, Charleroi.
Sec.-Treas., J E. Digby, McKees Rocks.
Ex. Com., Joseph M. Selheimer, Lewistown; J. E. Digby, Mckees Rocks; Geo. V. Thompson, Mt. Jewett; Pa.; Geo. L. Moore, Brownsville.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., F. B. Dunlap, Ft Smith, Ark.
1st V.-P., J. S. Warren Memphis, Tenn.
2d V.-P., Frank S. Gray, Jacksonville, Fla.
Sec.-Treas., C. B. Carter, Knoxville, Tenn.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove.
Secy. & Treas., J. W. McManus. Waxahachie.
1st V.-P., R. L. Penick, Stamford.
Dir.: T. T. Clark, Ennis: H. S. Allen, Calvert; W. A. Spangler, Bonham; D. B. McCall, Waxahachie; W. M. Gunnel, Charles Hutchins, Sam Mancos.

Wisconsin Hdw. Dealers' Assn.
Pres., Ralph Burtis, Oshkosh.
V.-P., E. Tietgen, Manitowoc.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; Jas. Murphy, Racine: H. J. Krueger, Neenah.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 42 to 47 inclusive.

The A. L. Babcock Hardware Company of Billings, Mont., wholesale hardware dealers, have established a branch in Bridger, Mont.

The Hawkins Paint Company of Kansas City, Mo., have increased their capital stock from $6,000 to $12,000. The assets are $13,000 and the liabilities $1,000.

The Gurney Refrigerator Company, Fond du Lac, Wis., recently equipped their factory with a new five hundred horse power engine. The former source of power had proved insufficient.

H. C. Sass, a hardware and stove dealer of Defiance, Ohio, has sold his stock and good will to Diehle Brothers. Mr. Sass expects to move to Chicago some time during the present month.

The Neverslip Anchor Wedge company of Auburn, New York, are introducing to the trade a new one-piece anchor wedge, which is used in connection with axes, hatchets, hammers and tools of a similar nature.

Madison T. B. Washington, James S. Tarcy and James H. Neal, 419 Market street, Camden, N. J., are the incorporators of the M. T. B. Washington Manufacturing Company, incorporated with a capital stock of $125,000, to manufacture cutlery.

The salesmen of the Cutler Hardware Company of Waterloo, Iowa, held a meeting recently to discuss current topics. They decided, among other things, that trade during the last six months had been vastly better than during any corresponding period for the last three years.

The Baldwin Forging & Tool Company have just completed a large plant at Columbus, Ohio, for the manufacture of shovels, spades, scoops, drain tools, post hole diggers and handles. The company placed its full line of output on the market, November 1st. Frank M. Baldwin, formerly of the Chicago Steel Manufacturing Company, is president and treasurer.

A beautiful turquoise exterior with absolutely pure white lining; an exquisite stone gray, mottled white, or the highest grade plain enamel known to the trade, are the three colors in which F. H. & E. B. Vrooman, 325 Dearborn street, Chicago, announce they will supply Vrooman's Peerless vitreous enameled sink strainer to the trade. The strainer may be had in two sizes, suitable for every requirement.

The Portland Cordage Company of Portland, Ore., have recently installed new machinery which will considerably increase the capacity of the works. In addition to these improvements, a modern plant has lately been completed by the same company at Seattle, Wash. The Seattle plant has a sixteen hundred foot rope walk for the manufacture of all sizes of large cordage.

It is announced that the Capewell Horse Shoe Nail Company of Hartford, Conn., have acquired control of the Maritime Nail Works of St. Johns, N. B. Dr. Williams, the secretary of the former company, confirmed the report of the purchase and said that the

tariff in Canada makes the exporting of the products of the Hartford factory into the Dominion absolutely impossible. One plant was established in Toronto by the company earlier in the year.

The publisher of THE AMERICAN ARTISAN and several of its principals have received cordial invitations to call at the reception rooms of the J. D. Warren Manufacturing Company of Chicago Saturday or Sunday morning, Nov. 4th or 5th, and receive one of the handsome souvenirs which this company will distribute at the Washington convention of hardware manufacturers and jobbers.

The wholesale and exporting firm of J. S. Barron & Company, New York City, dealers in woodenware, cordage, house furnishing goods and utensils, have moved into their magnificent new building at the southwest corner of West Broadway and Franklin street. This building was erected by the company on the site of their former home which was destroyed by fire in April, 1905. The new building is eight stories in height. It is fitted with all modern conveniences including fireproof construction, electric elevators and beauteous decoration.

The Star Expansion Bolt Company, 147 Cedar St., New York City, caution jobbers, dealers and consumers not to sell, purchase or use an expansion bolt and shield now being manufactured by the Wilcox Manufacturing Company of Aurora, Illinois, which is said to be an infringement on patents controlled by the former concern. The Star company have instituted suits against the alleged infringers asking damages and an injunction, preventing the latter concern from making, using, selling, advertising or otherwise dealing in these specitalties.

The next convention of the Ohio Hardware Association will be held in Canton, February 27th, 28th and March 1st, 1906. The Great Auditorium Building in that city has been rented for the occasion. The convention sessions will be held in the auditorium proper and the space in the surrounding rooms will be rented to jobbers and manufacturers for display purposes. Advertising space will be quoted upon a more reasonable basis than heretofore. With these added inducements, Frank A. Bare, the secretary, looks for the biggest attendance in the history of the association.

Henry Wilcox, founder and president of the Wilcox Hardware & Iron Company of Baltimore, Maryland, died October 23, at his residence in that city, aged 76 years. Mr. Wilcox conducted his business affairs personally up to almost the very moment of his demise. He took a keen interest in his business from the time when it was founded in 1850. He was also interested in other financial institutions, including a Baltimore bank, and a Baltimore fire insurance company. Although proffered several political offices, he declined them all. He is survived by six brothers and one sister, and by three daughters and a son. He lost his wife thirty-three years ago.

The Virginia-Tennessee Hardware Company of Bristol, Tennessee, has instituted a suit in the United States court at Abingdon, Virginia, against R. M. Crumley of Bristol, late vice-president of the Barker Hardware Company. It is petitioned that Mr. Crumley be enjoined from associating himself any further with the Mitchell-Powers Hardware Company of Bristol. According to the bill filed, it was agreed by the Barker Hardware Company, which recently sold out its entire business to the Virginia-Tennessee Hardware Company, that neither the president, J. M. Barker, nor any of the officers should engage in the hardware business in Bristol for a period of five years. The plaintiff asks damages.

The Santa Claus edition of *Our Drummer*, is unusually interesting, and contains a number of bargains for the holiday trade that will call forth enthusiastic responses from retailers in every line of industry. Hardware dealers wishing to take up specialties for the holiday trade, and hardware dealers who believe in adhering closely to the bounds of their own chosen line, will both find many items of interest in the thousand pages of this number. The front and back cover pages contain the usual number of brilliant shop talks. The prices for Santa Claus specials went into effect Oct. 27th and take precedence over all others. They are guaranteed during November until the December catalogue has been published. *Our Drummer* is issued by Butler Brothers of Chicago.

The Arcade Manufacturing company of Freeport, Illinois, have purchased the buildings and lots of the H. D. Bently estate, adjacent to their present property. The purchase includes a three-story factory with lots one hundred and eighty by forty feet. The holdings of the Arcade Manufacturing company now cover eight acres of land and one hundred thousand square feet of floor space, devoted to manufacturing purposes. Most manufacturers can boast of an enormous increase in their business during the last six months. It is probable, however, that the records of few other hardware manufacturers can show figures that equal in growth the greatly increased demand for the well known line of Arcade coffee mills, spring hinges, toys and other forms of hardware. The business of this company has been greater during the last year than ever before in their history.

NO CHANGE.

The program for the annual meeting of the American Hardware Manufacturers' Association, as printed in the last issue of THE AMERICAN ARTISAN, has been confirmed with one or two slight changes in phraseology. As set forth in that issue the Executive Committee will meet Tuesday morning, November 7th. The opening session of the association will be held Wednesday morning at 10 o'clock. This will be a joint meeting with the National Hardware Association. A general discussion of the catalogue house and other questions will come up at this time. Wednesday afternoon reports will be read by President Birge, Secretary-Treasurer Mitchell and other officers. On Thursday at 8 p. m. will occur the reception at The New Willard, which will be the grand social climax of the gathering and which will probably eclipse all past occasions of the kind ever tendered by the association. Speakers of national prominence will be heard. These will in-

clude Hon. Theodore P. Shonts, chairman of the Isthmian Canal Commission, who will address the convention on canal affairs; Gifford Pinchott, forester of the United States, one of the most admirable citizens as well as the greatest authority on horticultural matters in the country, and others of equal prominence. The speeches will be of the greatest interest to jobbers and manufacturers in both their business and their wider capacities. The immense banquet hall in which the reception will be held, the musical features, the magnificent decorations, the grand ensemble will make this occasion stand out predominant in the history of the 1905 gathering.

THE HARDWARE SPECIAL.

Final arrangements have been consummated by W. H. ("Pop") Bennett for the special train to be known as the Hardware Special and to bear ninety or a hundred happy members to the annual meetings of the American Hardware Manufacturers' Association and the National Hardware (Jobbers') Association. The train will leave the Union Station, Canal and Adams Sts., Chicago, promptly at 11 o'clock, Sunday morning, November 5th. It will arrive in Washington the following day at 10:42 a. m. The following stops will be made by the train in its transit across the country: Englewood, 11:23 a. m.; Grand Crossing, 11:27 a. m.; South Chicago, 11:34 a. m.; Plymouth, 1:17 p. m.; Fort Wayne, 2:50 p. m.; Van Wert, 3:43 p. m.; Lima, 4:25 p. m.; Crestline, 6:15 p. m.; Mansfield, 6:42 p. m.; Canton, 8:34 p. m.; Alliance, 9:10 p. m.; Pittsburg, 11:35 p. m.; Altoona, 4:00 a. m.; Harrisburg, 7:00 a. m.; Baltimore, 9:30 a. m.; Washington, 10:42 a. m.

Members will be picked up along the route, additional cars being supplied at the proper time. The best of service—the service for which the Pennsylvania Railroad is famous—will be provided. The run will be quick and over one of the best road-beds in the country.

President Roosevelt's secretary has confirmed the appointment for the President, who will receive the members arriving on the train at the White House, immediately after it reaches its destination.

PETERS AMMUNITION AT SEA GIRT.

The military competition held at Sea Girt, New Jersey, some time ago, gave new emphasis to the fact demonstrated in prevoius years, that Peters Factory Loaded cartridges are peculiarly adapted for accurate long-range military shooting. The most noteworthy single achievement of the meeting was the record made by Lieut. Tewes, who not only won the Wimbledon Cup, but also the Grand Laflin & Rand Aggregate for the best total score in the Wimbledon, Leech, Seabury, All Comers, Hayes, Hale, Meaney, Trophy and Spencer Matches. Lieut. Tewes' score was 16 points ahead of his nearest competitor. Other winnings made with Peters ammunition were as follows:

Inspectors' Match—Won by Lieut. K. K. V. Casey.
Seabury Long Range—Won by Lieut. W. A. Tewes.
Members N. J. S. R. A.—Won by Lieut. W. A. Tewes.
Reading—Won by Lieut. H. L. Smith.
Disappearing Target Revolver—Won by Lieut. J. Stedje.
Any Revolver—Won by Thos. Anderson.
Jones Rapid Fire Revolver—Won by Thos. Anderson.
Hale Match—Second, Lieut. W. A. Tewes.
Leech Cup Match—Second, Wm. F. Leushner.
President's Match—Third, Maj. R. W. Evans.
All Comers, Military Revolver—First, Thos. Anderson; third, R. W. Evans; fourth, W. F. Leushner.
Spencer Match—Second, Lieut. Casey; fourth, Capt. Cookson; sixth, W. F. Leushner.
Meaney Match—Second, Lieut. Tewes; third, Lieut. Casey; fourth, Ben South.
(Lieuts. Tewes and Casey tied for winner in this event but were outranked.)
Hayes Match—Second, Lieut. C. S. Benedict; third, Capt. W. W. Cookson.
N. J. S. R. A. Trophy Match—Third, Maj. R. W. Evans; fourth, Lieut. C. S. Benedict; fifth, Lieut. W. A. Tewes; sixth, Capt. Cookson.
All Comers' Match—Third, Maj. R. W. Evans; fourth, Wm. F. Leushner.
Consolation Match—Second, C. F. Silvester.
Windledon Match—Second, Lieut. Casey.
Seven of the high ten scores made with Peters' cartridges.

In addition to the above, there was some very fine work done in some of the other matches. Lieut. Casey in the Spencer and Seabury matches at 800 yards made a total of 20 consecutive bulls. The finish of the Wimbledon Cup Match was interesting. Lieut. Tewes was almost the last man to shoot and was generally conceded to have the match won, before his last shot was fired. He was just as careful in this shot as his previous ones, however, and after deliberate preparation and careful gauging of wind and light, he fired, scoring a center bull's eye. All these performances indicate that Peters primers, the new Peters bullet and Peters manner of loading are most accurate.

A SPECIAL TOOL.

The accompanying illustration shows an important tool in the estimation of wood workers and amateurs who are especially interested in pattern and cabinet making. It is some times called a jack board.

Stanley Chute Board.

The board is made of cast iron of ribbed construction. There is an adjustable runway for the plane. The swivel is indexed for cutting a square and a miter, but can be fastened with a clamp screw at any desired angle between zero and ninety degrees. The plane iron is fitted with a lateral adjustment, and a cut giving any ordinary draft to a pattern can be made.

The sliding back will support the work close to the plane, preventing it from splintering. The clamp for the sliding back will hold any shaped work in position to be planed. The plane is especially constructed to fit the board and the iron is set on a skew making a smooth keen cut. The board is japanned, is twenty-two inches long and nine inches wide.

It is made by the Stanley Rule & Level Company, of New Britain, Connecticut, who will be pleased to furnish additional information to those mentioning THE AMERICAN ARTISAN.

STANDARD SIZE CATALOGUES.

The report of the committee on standard size loose leaf catalogues of the Southern Hardware Jobbers' Association has been given out for publication. The action taken is gratifying and should aid materially in correcting a long suffered abuse. The report follows:

After a very careful canvass of our membership, both as to the size of catalogues and loose leaf binders they are now using and their ideas and wishes as to something more desirable, if any, we recommend the adoption of the following size sheet for the regular printed bound catalogues: 8¼x11 inches. For use in Loose Leaf Binders, we recommend the adoption of sheet 9½x11. Ordinarily the printing space on either sheet will be the same, the loose leaf sheet being wider to permit of its being inserted in the loose leaf binders, the necessary margin for binding being greater than in the regular bound books. Printing space or type form should not be over 6¾x9¼ inches on either bound catalogues or on sheets for loose leaf binders.

Your committee does not recommend the adoption of any particular style or make loose leaf binder; however, for your information would suggest The "Tengwall" Binder as one possessing excellent merits. Price $3.90 each in one dozen lots. Address The Tengwall Co., Chicago, Ill.

Very respectfully,

J. D. MOORE,
CHAS. H. IRELAND,
C. B. CARTER,
Committee.

ANENT THE SUSPENDED ORDER.

C. B. Carter, the energetic secretary-treasurer of the Southern Hardware Jobbers' Association, scented danger as soon as Fourth Assistant Postmaster General De Graw's proclamation, ordering the distribution of mail addressed by number only to rural free delivery patrons, was published. He has addressed a second circular letter to the members of his association, calling for united effort and suggesting an effective method. The letter follows:

Your attention has already been called to the evils which will develop in case the proposed efforts upon the part of the Catalogue Houses and their cohorts to secure the authorization upon the part of the Postoffice Department for the numbering of Rural Free Delivery Mail Boxes are successful; however, the importance of this proposition is so great, that we again desire to call your attention to this matter and to suggest ways and means whereby additional opposition may be directed against the favorable evidence that the Catalogue Houses' interests are accumulating.

We first ask your careful consideration of the pamphlet enclosed herewith, bearing on this subject, prepared and published in the October Bulletin of the National Retail Hardware Association.

Secondly, we request that you furnish each of your salesmen with enough copies of this little pamphlet to give one to each of his customers.

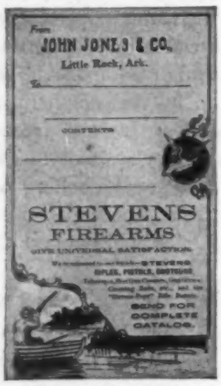
Thirdly, please impress upon your salesmen—by a strong letter—the great injury that would result to the retailers, the jobbers, as well as to himself, in case the Catalogue Houses were enabled to secure the numbering of the rural delivery boxes as they are now trying to do. It would unquestionably tend to a still greater centralization of business among the large mail order houses, to the detriment of both jobbers and retailers. The salesmen should know that the more the business of the country is transacted through the mails the less the field of operation and usefulness of the traveling man. The continued progress and development of the mail order houses surely and forcibly rings the death-knell of the traveling salesmen.

We also suggest that you also present this matter to your customers direct at every opportunity. We can accomplish wonders if the trade will co-operate and support our efforts. Will you do your share? If so, kindly carry out the suggestions given above.

WE WILL SEND YOU A SUPPLY OF THESE PAMPHLETS.

EFFECTIVE ADVERTISING.

The J. Stevens Arms & Tool Company of Chicopee Falls, Mass., have kept well to the front in the army of manufacturing concerns who believe in backing up the dealer. A heavy advertising outlay expended in the local papers of the dealer's home town, space taken in the leading household publications, follow up literature in the form of circulars, etc., represent only a fraction of the various means employed by these enterprising concerns. A somewhat novel method is the Stevens' envelope, shown in the accompanying illustration.



Stevens Envelope.

This is a practical advertising accessory furnished free to dealers. The J. Stevens Arms & Tool Company imprint these envelopes with the firm name of the retailer and his address. Lots are issued to local dealers in various quantities from 250 to 1,000. The paper of which the envelopes consist, is of durable manilla, open at the upper end. The flaps are gummed, permitting the dealer to seal the envelopes.

The envelopes used so far by customers of the J. Stevens Arms & Tool Company have been a profitable investment. The judicious distribution of this advertising matter invariably redounds to the interest of the retailer.

The company will be pleased to send these envelopes anywhere upon application, the dealer defraying the express or freight charges. Upon receipt of advice designating quantity wanted and shipping directions, the number desired will be sent. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

He didn't have a dollar; he didn't have a dime. His clothes and shoes were looking just as though they'd served their time. He didn't try to kill himself to dodge misfortune's whacks. Instead, he got some ashes and he filled five dozen sacks. Then, next he begged a dollar. In the paper in the morn he advertised tin polish that would put the sun to scorn. He kept on advertising, and, just now, suffice to say, he's out in California at his cottage on the bay.—From the Lyre.

A NEW MOP WRINGER.

The Dana Manufacturing Company of Cincinnati, O., the well-known manufacturers of the Peerless Iceland ice cream freezer, have been enabled by the enlarged space of their new factory building to place another specialty upon the market, which threatens to rival that of their older product in popularity. The new article is a mop wringer, shown in the accompanying illustration.

Dana Mop Wringer.

This mop wringer is easily operated and has one singular feature. The operator when manipulating her mop stands in the natural position, with both feet resting firmly on the floor. This position can be retained at the start as well as the finish of the operation.

The most popular feature of the Dana mop wringer, however, is undoubtedly the fact that it is manufactured by the Dana Manufacturing Company. The same policy that was adhered to by this company in extending the sales of the Peerless Iceland freezer will be utilized in selling this younger specialty. The same experienced, thoroughly wide-awake selling organization that made the ice cream freezer a household word in every state in the Union will manage the sales of the new article.

The Dana Manufacturing Company will be pleased to furnish additional information upon request. When writing, kindly add: "Saw it in THE AMERICAN ARTISAN."

PRIVATE BRANDS.

To THE AMERICAN ARTISAN:

It is becoming imperative that action be taken to quell the private brand evil. Conditions have now reached such a pass that unless a manufacturer agrees to supply jobbers with private brands, he is in danger of being forced to close down his factory. For the past twenty-three years we have steadily adhered to the conviction that the manufacturer's name ought to appear on every tool that he makes. We have adhered to this policy both to protect our own interests and advertise our goods, if the goods are actually worthy, and to protect the retail dealer, but it seems the jobbers are anxious to advertise their own names instead of the manufacturer's and that unless we consent to brand the tools that we make with the jobber's name, the jobbers will refuse to buy of us.

We would like to see something done in regard to this matter at the Washington meeting of the hardware men. We believe that private brands form a question of primary importance and we are glad to see the way THE AMERICAN ARTISAN is taking the question up.

"MANUFACTURER."

RETAIL HARDWARE DOINGS.

NEW FIRMS.

Weir, Massachusetts—John J. Fitzgerald.

Tifton, Georgia—Murray-Raines Hardware Company; capital stock $5,000; incorporators, W. G. Raines and others.

Amery, Polk County, Wisconsin—Hay Brothers' Hardware Company; capital stock $5,000; incorporators, John P. Hay, Clarence O. Hay and Ida M. Hay.

Rose City, Michigan—Frank G. Bell.

Cleveland, Ohio—West Side Hardware Company; capital stock $25,000; incorporators, R. S. Rogers, F. L. Judd and others.

San Angelo, Tom Green County, Texas—Wylie Hardware Company; capital stock $32,000; incorporators, D. K. Wylie, C. H. Wylie and J. D. Wylie.

Wyoming, Illinois—W. H. Peard.

Marshfield, Vermont—T. R. Barton.

Moorhead, Iowa—Taylor Daily.

Moorland, Iowa—B. E. Peterson.

Murdock, Nebraska—Hare & Tool.

Rupert, Idaho—F. L. Copening.

Cour d'Alene, Idaho—Brenson & Max.

Stratton, Nebraska—W. F. Woody.

BUSINESS CHANGES.

Fairmont, Nebraska—L. C. Clark succeeds F. M. Chapin.

Jerico Springs, Missouri—Peer Brothers succeed J. K. Peer.

Western, Nebraska—J. J. Staska succeeds Staska Brothers.

Mitchellville, Iowa—Edmundson & Leech succeed S. L. Shreves & Sons.

Sisseton, South Dakota—A. B. Mathews succeeds Mathews & Leavitt.

Snyder, Oklahoma—Bealle & Williams succeed Freeman & Mendenhall.

Los Angeles, California—Batty & Carter succeed D. I. Keller.

Ferndale, Washington—P. E. Wallin succeeds Kass-Hoberson Hardware Company.

Palouse City, Washington—M. H. Calef succeeds E. K. Wheeler.

Plymouth, Kansas—O. G. Walker & Company succeed J. W. McBride.

Eustis, Nebraska—F. C. Schroeder & Son succeed F. C. Schroeder.

Tangier, Oklahoma—R. L. Teeters succeeds W. T. Metcalf.

Wayne, Nebraska—Peterson & Berry; C. A. Berry retired.

Tingley, Iowa—C. F. Lukecart succeeds Lissner & Oxenreider.

Graettinger, Iowa—W. D. Weld succeeds Canfield Brothers.

Anthony, Kansas—M. L. Dickson succeeds Whitla & Dickson.

Texarkana, Arkansas—Louis Wagner succeeds J. F. Schicker.

Yarmouth, Iowa—W. S. Bozarth succeeds Bozarth & Featherby.

Cainsville, Missouri—Burris & Peshek succeed Hendricks & Burris.

Ames, Oklahoma—Olvey Brothers succeed E. M. Hendricks.

Enid, Oklahoma—Gibbs & Stout succeed E. F. Gibbs.

Enid, Oklahoma—Gibbs & Stout succeed Anderson & Company.

Bloomington, Illinois—Bert Cornwell succeeds the O. McNemar Hardware Company.

Dunlap, Illinois—George Christopher succeeds Charles Holmes.

Elk Rapids, Michigan—George Carnes succeeds F. M. Brett.

Schenectady, New York—John J. Tracy succeeds Tracy Brothers.

Traer, Iowa—William J. Dawson and Thos. A. Whannel succeed Daniel & Stavely.

Eureka, Illinois—W. C. Irwin and C. A. Bainum succeed G. M. Farr.

Eau Claire, Wisconsin—Wm. Helwig succeeds Luebkeman Hardware Company.

MISCELLANEOUS.

Chetopa, Kansas—E. W. Bedell, deceased.

Atoka, Indian Territory—The Atoka Hardware Company; new building.

St. Louis, Missouri—F. X. Becherer; deceased.

Spokane, Washington—Vinther & Nelson; damaged by fire; loss $3,000.

Eureka, Illinois—Payne Brothers; new building.

Heating and Ventilating

LITTLE PROBLEMS.

BY "OLD HAND."

I have noticed in several houses in which the system of hot air heating is employed that ample provision has not been made for the escape of the cold air. The arrangements for sending the hot air up to the rooms are complete. It is expected that the hot air coming up into the room will force the cold air out. The exit is supposed to be through the cracks of the window or through some door. Very often the systems of heating arranged in this way are found to be inefficient. The furnace is blamed and perhaps the system of piping. The true cause lies in the fact that in order to get warm air in, you must get the cold air out. The egress of the cold air must be provided for by something more than slipshod methods and is not to be left to chance. Efficient heating engineers have used the cold air register for many years and most of them recognize its value. The fact remains, however, that a great many engineers in the smaller towns and in the more isolated sections of the country are partially or wholly ignorant of the advantages to be derived by its use.

It is a well known fact that cold air is denser than hot air and has greater specific gravity than hot air. Cold air will displace hot air whenever possible. Hot air does not rise; cold air shoves the hot air up. In the same way cold air will keep the hot air down in the furnace pipes. In a room, the windows of which are not open and which is sealed or partially sealed in other respects, it is almost always impossible to force the hot air up. In one house that I have in mind there was a good fire in the furnace and only one register was left open. There were no cold air registers. Nevertheless, the room with the open register could not be heated. Such a condition of affairs can be due to no other cause except faulty construction.

A cold air register may be supplied with every room of considerable proportions. This register should be of almost the same magnitude as the hot air register. It is a good plan to run a cold air return pipe to the furnace, connecting all of the branch cold air ducts to the same trunk line. Of course this pipe should be entirely separated from the regular cold air pipe running from the outside of the house. At least one large cold air register is desirable in every house.

All of these things are generally known, but, strange as it may seem, they are not generally regarded.

PARAGRAPHS.

Mahlon M. Carr, Jacob S. Baumbaugh, J. W. Skeeley and others are the incorporators of the Fostoria Sheet Metal Company of Columbus, Ohio, capitalized at $10,000.

Green's steel plate furnace is made of steel entirely to fulfill the demand for this type of heating apparatus. The fire travel is long and the entire surface from top to bottom is radiating surface. This furnace is closely riveted like a steam boiler and contains a feed chute which extends through the casing. In 1904 this company sold double the number of furnaces sold in 1903. Their line is a wide one, including different types of cast iron furnaces.

The patented air blast used in the construction of the Akron Air Blast furnace, manufactured by May & Fiebeger of Akron, Ohio, consists in a two-way diving flue, made of heavy cast iron. The upper pipes admit the air into the gases; the lower pipes into the fuel above the ashes. Gases will not burn without oxygen. An analysis shows that about fifty per cent of soft coal is gas. The manufacturers of this air blast furnace claim that a large percentage of these gases is consumed by their patented air blast feature.

The Stanton Heater Company of Martins Ferry, Ohio, manufacture the Stanton Seamless heater, which is designed on different principles from those of most furnaces. The cold air enters the furnace at the bottom and then up around both sides of the furnace and out through the top. The products of combustion pass through the front flues from front to rear at the bottom between the radiating sheet and the ash box sides: also from the bottom at the rear of the furnace to the smoke outlet in the smoke box. Catalogue No. 7 Series B, describes the furnace graphically with numerous illustrations.

The National Heating Appliance Company, lately incorporated at Utica, N. Y., have opened a Western sales office at room 621 Roanoke Building, 145 La Salle street, Chicago. C. A. Read is in charge. Mr. Read will look after the sale of the Shoals Fuel-Saving Attachment in the Chicago district. F. W. Dowding will represent the company in Pennsylvania, Connecticut and Massachusetts, and E. F. Linn will call on the heating trade in New York state. D. G. Evans has been appointed general sales manager, with headquarters in Utica. The company reports very gratifying sales with excellent prospects.

The Michigan Safety Furnace Pipe Company, Detroit, have recently bought out the factory formerly used by the Penberthy Injector Company of the same city. It is a four-story brick building, fronting one hundred feet on Abbott street and extending back seventy feet along Brooklyn avenue. There are two wings, one of which is sixty by fifty feet and the other fifty by thirty feet. The company will move on or before January first. At present they are so crowded with work that new business is being refused. With increased facilities, they expect to catch up on old orders and extend their trade in all directions.

Monitor furnaces are not experiments, having been used for many years in different sections of the country. The manufacturers, the Keith Furnace Company of Des Moines, Iowa, have yet to learn of a single instance where the Monitor furnace failed to do its duty. These furnaces are made in a number of different styles, but each one was designed along practical lines and was built to fulfill a certain purpose. All the parts used in the construction of these furnaces are manufactured in the plant of this company. With a correct construction, with the best of material and with careful and experienced mechanics, the output of this company has met with a notable success.

Tinshop

Principles of Intersection.

PART XXI, PLATE VIII.

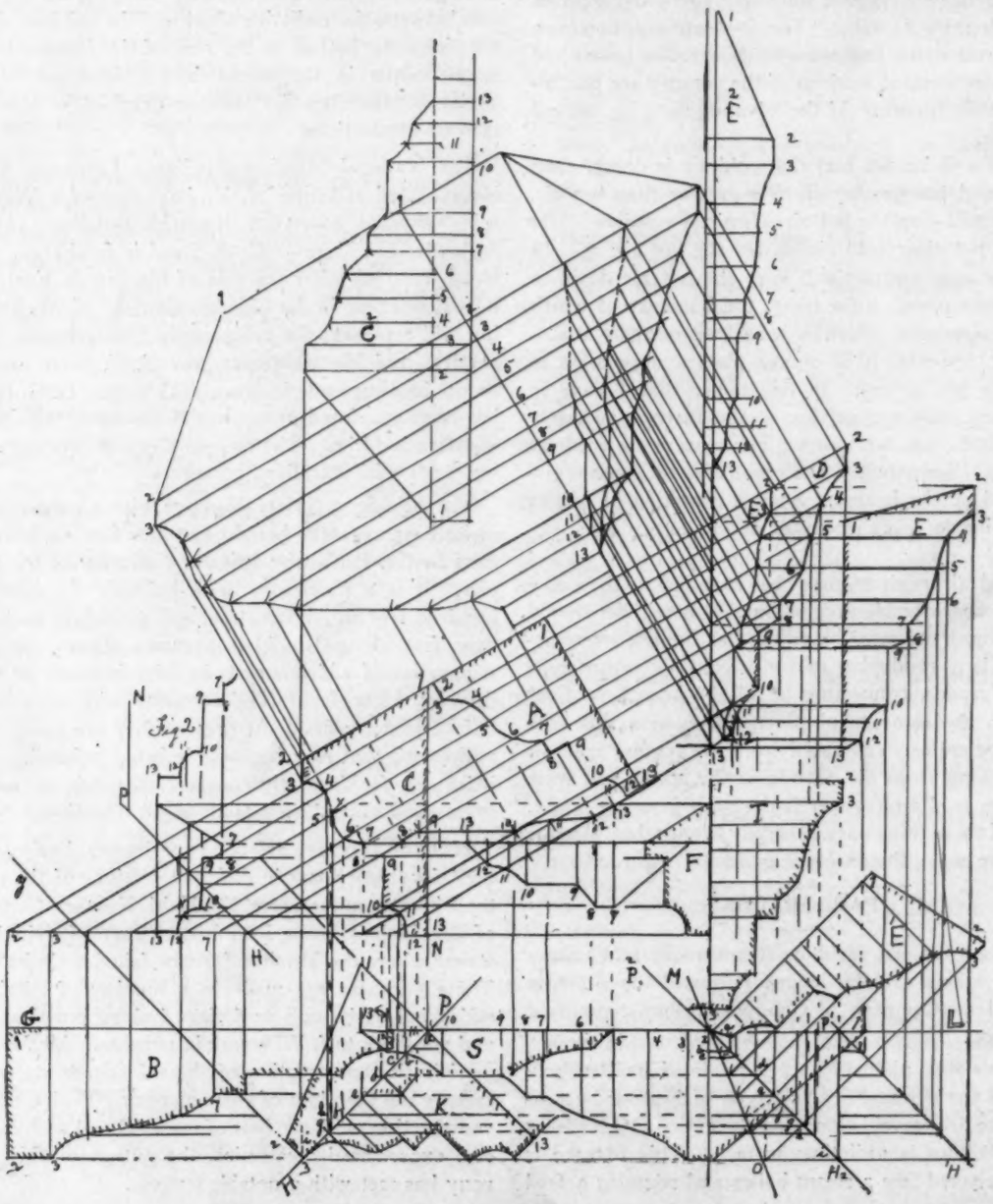
(Copyright, 1905, by Joseph P. Coleman.)

HOW TO FIND THE THREE PATTERNS AT TOP OF GABLE, GIRTH OF PROFILE A.

Draw a right section line through the gable, at point 13, as shown. On this line space the points of division numbered on profile A 1-2-3-4-5-6-7-8-9-10-11-12-13. Through the points draw lines perpendicular to the right section line, and on those pattern lines space off the distances from the right section line in gable to the points numbered on the surface of profile D, the octagon form and the gable cutting line. You space off those distances by drawing lines parallel to the right section line which was drawn through gable—the lines pass through each point respectively—and cross the same numbered line in the pattern sheet giving points. Lines traced through the points give the patterns for the intersections at the top of the gable. The pattern from the points in D is to join the square mitre cut from the outstretch of D. When joined the angle in plan is a right angle or square in plan.

HOW TO FIND THE OCTAGON MITRE PATTERN E^2.

Space off the points of division, 1-2-3-4-5-6-7-8-9-10-11-12-13, as shown on the profile E, which is placed on the right of profile D on the plate. Those points are spaced on the vertical line passing through the gable as shown. Draw horizontals through the points.



Draw the vertical lines through the points on the line O-M in plan. Those lines pass through the points on the profile E^2, and cross the pattern lines on top of the plate. Mark the points where the lines cross. Trace lines joining the points on the pattern lines, giving the required form of the octagon mitre pattern E^2. This pattern is the regular octagon mitre for two moulds whose bases rest on a horizontal plane, and the angle formed by joining the moulds is an angle of 135 degrees, the octagon angle. To properly understand raking mitres the *principle is*: Consider the inclined mould as a stairway; the top of gable is a landing, a level surface. A moulding can rest on that level surface and join the gable mould, forming a right angle, or an octagon angle or any desired angle in plan. The mould in the gable must extend to join the horizontal mould. Place the intersecting plane in plan at the proper angle with the ground line—say 45 degrees for a square mitre, 22½ degrees for an octagon, 30 degrees for a hexagon, and so on. The mitre pattern for the horizontal mould is just the same as if there were no gable mould to join to, because you consider the landing at top of gable as a new horizontal plane.

The pattern for the gable mould is found by measuring from a right section line to the points on the profile of the horizontal mould. If the cutting line in plan is 45 degrees the profile is shown full projection; an octagon cutting line gives an octagon projection. You must find the full size of the profile of the horizontal mould as I have explained in the solutions as E.

INTERSECTIONS BETWEEN THE GABLE MOULD, PROFILE A, AND THE HORIZONTAL RETURN AT BASE OF GABLE, PROFILE C—ALSO INTERSECTION WITH INCLINED PLANE AT BASE OF GABLE.

The parellel lines drawn through the points 1-2-3-4-5-6-7, profile A, intersect the points on surface of profile C in 1-2-3-4-5-6-7. The points 8-9-10-11-12-13, profile A, intersect the inclined plane in points 8-9-10-11-12-13 as shown at base of gable. These points on profile C and on the incline are found in the following manner: G-L is the ground line. H-P is the trace of the cutting plane in plan. The horizontal lines drawn through points on profile B intersect the line P-H in points a-b-c-d-e-f-g-h-i-3. Vertical lines drawn through the points intersect the lines in gable in points as follows: Line drawn through point 3 intersects the gable lines in 2 and 3, forming vertical face. Line drawn through point 1 intersects the gable line in point 4. Line drawn through point g intersects gable line in point 5. Line drawn through point f intersects gable line in point 6. Line drawn through point e intersects gable line in point 7, base of ogee. Join points 3-4-5-6-7, completing form of ogee mould. The intersection of gable lines on the incline has been explained.

HOW TO FIND THE PATTERN OF THE INTERSECTIONS.

The pattern lines have been drawn. Draw lines perpendicular to pitch of gable through points 1-2-3-4-5-6-7 on ogee form, profile C, to intersect the pattern lines in points 1-2-3-4-5-6-7. Join 1 to 2, giving bevel line in pattern. Draw lines joining the other points, giving the ogee form of the pattern. Line 8 in the gable terminates on fillet, giving point 8; line 9 terminates in point 9 in the incline; the other lines terminate in points numbered similarly. Draw the lines perpendicular to pitch of gable from the points on the incline to intersect the pattern lines in points 8-9-10-11-12-13. Lines drawn through the points give the complete pattern form at intersection of base of gable.

SQUARE MITRE, FIG. 2.

The points 7-8-9-10-11-12-13 are spaced on the horizontal line drawn through points 7-8 at base of ogee. Draw perpendicular lines through the points P-H in the cutting plane. Draw horizontal lines through the points on line P-H to intersect the pattern lines in points 13-12-11-10-9-8-7. Space the length of the inclined line at point F. Lines traced through the points give pattern as shown at base of gable, F. The pattern for profile D is found as follows: The points 1-2-3-4-5-6-7-8-9-10-11-12-13 are spaced on the ground line. Draw the vertical lines through the points, cutting line H^2-P^2. Then draw the horizontals through points in line H^2-P^2, crossing the pattern lines in points. Lines traced through the points give square mitre return, profile D, top of gable. The pattern just found is the ordinary square mitre. All the patterns have been described that are developed on the paper.

SUMMARY OF THE PATTERNS.

Every pattern is an inside and outside mitre.

Every pattern can be used twice, the mouldings can be inverted.

Every pattern is found by employing cutting planes.

Square mitre C^2, counts 2 inside and outside mitre.

Square mitre C^2, can be inverted, counts 2, right section cut is a mitre 1. Therefore C^2 represents five mitres as described.

Gable mitre at top of gable, inside and outside mitre 2, inverted 2, right section 1, octagon intersection top of gable. Same enumeration 5 mitres.

Square return intersection, top of gable. Same enumeration 5 mitres.

Octagon mitre E^2, horizontal mould, top of gable. Same enumeration 5 mitres.

Square mitre, square return D, top of gable. Same enumeration 5 mitres.

Intersection with Mould C at base of gable. Four mitres.

According to the enumeration so far each mitre can be used for four positions. The right section cut is counted only once, making 5 positions in all. Therefore C^2, three mitres at top of gable, octagon mitre E^2, square mitre D, equal 30 mitres. Intersection with Mould C at base of gable equals 4 mitres, making a total of 34 so far. I have counted the intersection between mouldings, when joined together. Every moulding cut by a plane can be regarded as a mould intersecting a brick wall. The moulding can be inverted, as every mitre counts 2, inverted 2 more, or 4 in all. You can multiply each of the mitre patterns by section of gable mould by plane H-P is the same as intersecting a moulding against a brick wall in an angular position, and counts 1. K is the section. This method of enumeration give a total of 59 patterns described from the plate.

I will classify the patterns in sheet metal work construction.

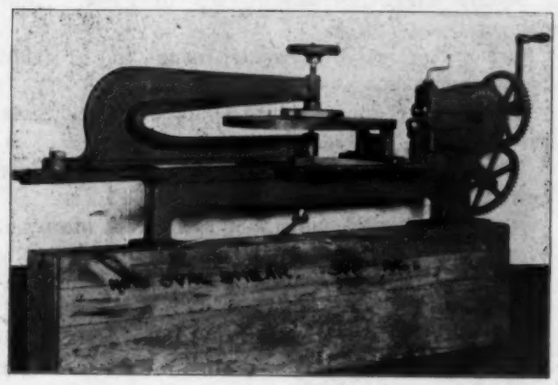
Square mitre, octagon mitre, 2 square return at base of gable. Square return at top of gable, octagon re-

turn at top of gable, gable mould cut by inclined plane at base, gable mitre, gable mould A joining profile T, horizontal mould C joining the angular cut section cut K. Gable mould A joining profile B.

Turn the paper to the right, describing a quadrant. In this position Mould A is in a gable, inclined to the horizontal at an angle of 60 degrees. A line drawn through the wall line of Mould F is the ground line. Mould B is a gable section in elevation. The vertical plane is drawn through the base line of Mould F. The base of Mould A is cut by inclined planes, as shown. So you can see this plate is very instructive. Every mechanic ought to have models of sheet metal, using mitres obtained from these intersections. The square mitre pattern C^2 will join a square end cut from outstretch of Mould K, and form an octagon angle in plan. The principle is: Mould K is an angle section. The cutting plane H-P cuts a square end from Mould K, as shown in plan. The projection of Mould C is taken as a side of a square, and the projection of Mould K as the diagonal of a square.

NIAGARA SHEARS FOR OVAL AND OBLONG SHAPES.

The rotary shears shown in the accompanying illustration put upon the market by the Niagara Machine & Tool Works, Buffalo, N. Y., are particularly intended for cutting oval and oblong shapes of sheet iron not to exceed No. 22 gauge. They can be easily operated and adjusted for work of various sizes and outlines, and they will cut the material without burring it. The sheet is clamped between the cam and clamping disc, the outside of the cam resting on a support with idlers. During the cutting operation the clamping arm, which is pivoted at the outer end, swings sideways, as required for the shape that is being cut. Each shape necessitates an extra cam. The machine will take care of work up to forty inches long, but the diameter of the end curves must not be less than twelve inches.



Rotary Shears.

By substituting the circle arm that is used on No. 13 Niagara ring and circle shears for the oval attachment, the machine will become suitable for cutting outside circles and holes. The cutting head as a throat nine inches deep, and the throat of the circle arm is thirty inches deep. The circle shears will cut circles from three and one-half inches to forty-two inches in diameter.

NOTES AND QUERIES.

GAS METERS.

From Charles Wannemacher's Sons, Ottoville, Ohio.

Where can we buy gas meters?

Ans.—The American Meter Company, 99 Jefferson St., Chicago; John J. Griffin & Company, 99 Jefferson St., Chicago; Maryland Meter Company, 88 Jackson Boul., Chicago; D. McDonald & Company, 99 Jefferson St., Chicago.

LIGHTING APPARATUS.

From M. V. Olsen, Viborg, South Dakota.

Where can I buy gasolene lighting apparatus?

Ans.—Twentieth Century Mfg. Co., 19 Warren St., New York City; Superior Mfg. Co., Ann Arbor, Mich.; Detroit Heating & Lighting Co., Detroit, Mich.; Epworth Gas Light & Heating Co., Waterloo, Ia.; American Lava Co., Chattanooga, Tenn.; D. G. Trench & Co., Chicago; F. C. Wilson Co., Chicago; H. Geissel & Co., Chicago; Solar Acetylene Gas Co., Minneapolis, Minn.

GAS STOVES AND ACCESSORIES.

From Chryst & Humphrey, Morrison, Illinois.

Where can we buy gas stoves, ranges, hot plates and similar apparatus for use with artificial gas?

Ans.—Geo. M. Clark & Company, 72 Lake St., Chicago; Schneider & Trenkamp, Cleveland, Ohio; Silver & Company, 304 Hewes St., Brooklyn, N. Y.; H. Adler Company, 741 First Ave., Pittsburgh; Independent Manufacturing Company, Cleveland, Ohio; A. J. Lindemann & Hoverson Company, Milwaukee; Pittsburgh Stove & Range Company, Pittsburgh; Taylor & Boggis Foundry Company, Cleveland, Ohio; Yale Gas Stove Company, 73 Court St., New Haven, Conn.; Worcester Gas Stove Company, Worcester, Mass.; Wabash Stove Company, Wabash, Ind.; Page Brothers & Company, Boston, Mass.; D. F. Valentine, Fort Wayne, Ind.; Gate City Stove Works, Catlettsburg, Ky.; E. C. Hart & Company, 59 Dearborn St., Chicago; Doyle Air Burner Company, Chicago; Eagle Range Company, Shelbyville, Ind.; Eclipse Gas Stove Company, Rockford, Ill.; Economy Stove Manufacturing Company, 356 Scranton Ave., Cleveland, Ohio.

BRASS TUBING.

From C. E. Odell & Co., Gilmore City, Ia.

Where can we buy brass tubing ½ x ¾ in.?

Ans.—Chicago Brass Company, Chicago; Hungerford Brass & Copper Co., New York City; Merchant & Evans Company, Philadelphia; John McVoy & Company, Chicago; Plume & Atwood Manufacturing Company, Chicago.

ECONOMY FURNACES.

From Clark Bros., Lakefield, Minn.

Who makes the Economy line of heating furnaces?

Ans.—International Heater Company, Utica, N. Y., or 44 Dearborn St., Chicago.

GAS FURNACES.

From "Reader."

Where can we buy furnaces for heating houses by gas?

Youngstown Furnace Company, Youngstown, Ohio; Pittsburgh Stove & Range Company, Pittsburgh; Stanton Heater Company, Martins Ferry, Ohio; Co-

lumbus Heating & Ventilating Company, Columbus, Ohio; Pickett Hardware Company, Warren, Pa.; Schellhamer & Sons, Warren, Pa.; C. W. Rice, Columbus, Ohio.

ITEMS.

O. B. Ensey, Henry A. Stumpf, George J. Mast and others are the incorporators of the Master Sheet Metal Workers' Association of Indianapolis, Ind.

J. W. Anderson of Gray, Me., is president and J. R. Parsons of Yarmouth, Me., is treasurer of the United Metals Company, incorporated with a capital stock of $50,000, to deal in metals.

J. J. Hernan is president and W. F. Crommet is treasurer of Ammidon & Company, incorporated with a capital stock of $125,000, to deal in tin, sheets, etc. The business will be centered at Portland, Me.

A number of idle mills of the American Sheet & Tin Plate Company in Indiana have resumed operation. The Humbert mill of the same company, located at McConnellsville, Pa., will resume operation November 6th.

L. H. Mead, A. L. Ramsey of Perth Amboy, N. J., and others are the incorporators of the Jersey City Foundry Company, 110 Smith street, Perth Amboy, N. J., incorporated with a capital stock of $10,000, to conduct a brass foundry.

The name of the Robert Aitchison Perforated Metal Company, of Chicago, has been changed to the Aitchison Perforating Company. The capital stock has been decreased from $50,000 to $25,000, and the number of directors from five to three.

The Burgess Soldering Furnace Company, of Columbus, Ohio, are occupying a new building at 292-294 East Long street, that city. The building is one hundred and twenty by thirty-five feet, and is fully equipped with the latest kinds of machinery for the manufacture of soldering furnaces. Natural gas will be used for power and electric light for lighting. The Gem tinners' furnace has been successful in filling requirements for a furnace that creates no smoke, odor or noise. It is made with galvanized iron, brass or copper reservoir.

The Garry Iron & Steel Company, Cleveland, Ohio, report on hand five thousand rolls of galvanized, double cross-lock, roll roofing. All of the sheets are squared before locking and every roll is twenty-six and one-half inches wide and fifty feet long. This immense stock of roll roofing is merely, however, one example of the immense stock that The Garry Iron & Steel Company constantly maintain in their warehouse. They carry all styles of roofing, both galvanized and painted, eave troughs, conductor pipe, tin plate, galvanized sheets, etc. Orders are shipped the same day as received.

When Marlowe announced that "comparisons were odious," it is probable that all roofs were alike in number and variety of infirmities. Since Marlowe's time, however, the world has come to learn that everything is only good or bad in relation to something else. For instance, the Cortright Metal Shingle Advocate announces that if Marlowe had lived under a Cortright metal shingle roof, he would have said, "comparison is a good thing." The November number of this publication explains why thousands of other people would join Marlowe in a similar declaration. The paper is published by the Cortright Metal Roofing Company of Philadelphia.

An enamel ware plant is about to be started at Wheeling, W. Va., by George A. Blackham. Mr. Blackham's experience as former manager of the Sanitary Ware Manufacturing Company of Pittsburg will enable him to fill his new position satisfactorily. The capital stock of the new company will be $70,000, of which $50,000 was subscribed almost entirely by Wheeling interests. The old plant of the Wheeling Ventilating, Heating & Foundry Company at Elm Grove will be used by the new company. The plant will employ from one hundred and fifty to two hundred men. The daily capacity in bath tubs alone will be about one hundred finished pieces.

The Asphalt Ready Roofing Company of 130 Water St., New York City, have recently placed upon the market the Protection Brand Asphalt Ready Roofing, which is sold in rolls. These rolls are surfaced with gravel or sand before being shipped from the factory. A six-inch lap edge is provided to be nailed to the roof boards. An overlapping sheet should be cemented on and after that no nails are required. The ability to apply roofing without the use of nails makes this brand decidedly popular and durable. This roofing is manufactured especially for roofs subject to gases arising from boilers, locomotives, coke ovens, chemicals, etc., although it is just as desirable for roofs not susceptible to inroads from these sources. The roofing is readily laid, the work consisting of cementing and nailing the joints. The manufacturers publish a book of instructions which they will be pleased to mail to those mentioning THE AMERICAN ARTISAN.

There is an old enameling plant at Portland, Conn., that has been used for about thirty years, off and on, for the manufacture of tin and enamel ware. During this period, the plant changed hands several times from the time when Boss Tweed and his New York allies originally established it. For some years, it was conducted by the Ingersoll family, and later was managed by the defunct Joseph Scheider. About ten years ago Mr. Scheider sold the plant to the National Enameling & Stamping Company of Baltimore, Milwaukee, Chicago and elsewhere. Five years ago, the latter company closed the plant, distributing the machinery in their various other branches. About two months ago, they disposed of the plant to New York interests and now the New England Enameling Company of Middletown, Conn., have leased it, with the exception of one building, occupied by the Main Product Company. In the course of a month or so, the plant will be in running order, and will have practically the same output as the Middletown plant. The New England Enameling Company have been extremely prosperous since their organization, using their establishment both day and night for manufacturing purposes.

Trade Report.

IRON AND STEEL MARKET.

Prices are stiffening in the local market and last week $14.00 for number two, Birmingham, was the ruling quotation. In the meantime Northern foundry, number two, had risen to $18.50. Steady buying was the rule, one large wheel manufacturer having bought twelve thousand tons of Lake Superior charcoal and nine thousand tons of Malleable Bessemer. A Michigan machinery firm bought about twelve thousand tons of different kinds of northern and southern irons. Inquiries ranging from twelve thousand tons downward for basic charcoal and malleable irons principally, are pending. The leading Virginia interests in number two foundry withdrew from the market for the first half of next year and greatly increased the strength of the product in that state. The Chesapeake & Ohio threatened to advance rates twenty cents a ton on pig iron beginning November 1st, but the action has been postponed to the first of the new year.

Forty thousand tons of standard steel rails were bought during the week under review by western and southwestern roads. These orders were booked by the local mill and were supplementary tonnages to those sent in earlier in the year. The demand for light rails and track supplies is heavy. The total tonnage taken during the past month by the local interest is about fifty per cent in excess of its output.

The last week showed a reaction in the sheet market, the demand slackening considerably and quotations becoming more ragged than for several weeks. $2.20, Pittsburgh, for number twenty-eight gauge is not uncommon. Some mills decline to sell at what they consider below-cost prices, but as a general rule, buyers have no difficulty in obtaining great concessions.

W. P. Rainey Coke Company has closed a contract with the United States Steel Corporation to deliver its entire output to the latter company for the first six months of 1906. This practically puts the corporation in control of standard Connellsville coke, preventing most of it from reaching the open market. This act is regarded by furnace interests as a bit of retaliation on the part of the Corporation against furnaces that refused to reduce their quotations on Corporation orders. The Steel Corporation has bought altogether during the last year about three hundred thousand tons of pig iron. Prices a month ago were not reduced below the $16.00 basis by the furnaces in spite of the demand by the Steel Corporation that favoritism be shown. The latter company will now command the price on coke and will be able to raise or lower prices for furnace interests in retaliation.

PIG IRON.

Rogers, Brown & Company will say in their weekly report:

The market has seen a drawing closer of all the lines in and around the iron market with the consequent emphasizing of some points. The available supply of iron for delivery prior to July 1st, 1906, has been greatly reduced; furnaces, as their order books get in satisfactory shape, withdraw from the market and serious inroads are being made on furnace stocks, through the increasing demands for early shipment, in spite of increased production reported to be going on at the rate of at least 26,000,000 tons per annum.

Buyers everywhere show an eager desire to purchase as far ahead as the furnaces will offer. In most cases they are willing to buy far beyond the period agreeable to the furnaces.

Most often with a market such as has prevailed for the last month it has been repeatedly claimed and proven that actual consumption was not proceeding at anything like the rate that the volume of buying would indicate. At the present time it is conceded that true consumption is proceeding nearer that amount which experts figure is justified by the volume of buying, than ever before. To this is mainly due the stability, strength and freedom from generally discouraging features of the present movement.

In order that the reader of these reports might understand one of the underlying reasons for this state of affairs, we have frequently mentioned the tremendous business being contracted for in the leading lines of iron consumption. This can now be pointed to as bearing out the foregoing statements.

The sharp demand for Bessemer evidenced in all markets last week was due to the influence of the Steel Corporation option on 100,000 tons for November and December, and culminated in their finally closing on the basis of $16.50. This makes approximately 700,000 tons bought during the year, over and above their own capacity. Even before the purchase was closed, makers had gone on record for $17.00 and $17.50 furnace for Bessemer iron and the available supply for 1905, short as it is, will now be held at high figures.

A feature of the local trade has been the strong demand for Malleable; orders booked and iron under offer will foot up a good tonnage. Eastern and Virginia Basic are sought, as is also low phosphorus. The latter is scarce and the price high. The steady demand for foundry and mill iron continues. Southern iron has advanced rationally to a strong basis of $14.00 Birmingham, with a number of Southern interests out of the market. In the North some of the larger buyers are again in the market after having only recently purchased.

An imposing list could be made of the tonnage of structural, bridge and other steel, as well as rails, which continues to be placed.

There are a number of contracts for furnace coke still pending, as well as several important contracts for foundry coke for 1906 delivery. Prices are firm with advancing tendency, and a number of the largest producers continue steadfastly out of the market.

Railroad transportation of heavy freight is in most serious shape. With the activity in all manufacturing lines and the crop demands, this is not as surprising as is the manifest unpreparedness of the railroads after having experienced similar occasions so frequently in the immediate past. It is estimated that the amount of freight offering now is forty per cent greater, while railroad facilities are only fifteen per cent greater as compared with one year ago.

Matthew Addy & Company will say in their weekly report:

Buyers waited a few days to catch their breath when the price of No. 2 was put to $14.00, f. o. b. Birmingham. Then they started in again for the little lots there were obtainable. The main fact in the market is the heavy buying at top prices for far ahead delivery. Several times it has seemed as if the absorbing quality of the trade had been exhausted, and that necessarily things would be quieter from the fact that every one had bought all the iron that could

be used. But this has not been the case. Consumers are using iron at a faster rate than they anticipated, and they are getting so much more business on their books that they are contracting for forward deliveries heavier tonnages than seemed possible sixty days ago. An unparalleled consumption of pig iron is the secret of the strength of the market. There is no speculative boom about iron just now. To tell the truth, many producers would prefer to see prices stay safely fixed at a lower level; but they really have no influence on a market as broad and vigorous as is the case to-day. The buyers are making the market, and their wants are so great that no power on earth could keep prices down. So whether the furnacemen would like to see $12.00 or $13.00 iron does not matter. The laws of supply and demand as usual are the things with which to reckon. But it is to be noted as a remarkable fact that the producers in the excitement of the last ninety days have kept their heads. It might have been possible to have put prices up several dollars per ton higher than they are now. In fact, with the way things were managed some years ago there is no question but that this buying movement would have meant $16.00 or $17.00 pig iron. The conservative forces in control of the market have really been able to keep the boomers and the speculators in check.

The week has seen a vigorous inquiry, and a considerable tonnage of iron has been booked by large consumers for delivery over the second quarter of next year. One machinery manufacturing concern purchased 13,000 tons. There is quite a call for spot shipments of all kinds of iron, but the great bulk of the demand is for deliveries through the second quarter, while every now and then a buyer will ask for prices through all of 1906.

SHEETS.

John McVoy & Company, Chicago, report as follows:

Market conditions are improving and the prospects are very bright for an advance on galvanized and black sheets and possibly tinplate. If it were not that it is so late in the year there is no doubt but an advance would take place immediately. As it is, an advance may be looked for almost any time during the present month.

We quote prices as follows:

Black sheet steel No. 16 gauge, $2.45; No. 18-20 gauge, $2.50; No. 22-24 gauge, $2.55; No. 26 gauge, $2.60; No. 27 gauge, $2.65; No. 28 gauge, $2.75; No. 29 gauge, $2.95.

Wood's smooth, No. 20 gauge, $2.90; No. 22-24 gauge, $2.96; No. 26 gauge, $3; No. 27 gauge, $3.05; No. 28 gauge, $3.15.

Wellsville polished sheet steel, 24 gauge, $4.85; 26 gauge, $4.95; 27 gauge, $5.05; 28 gauge, $5.15.

Galvanized sheets, regular sizes, 14 and 15 gauge, $2.80; 18-20 gauge, $2.05; 22-24 gauge, $3.10; 26 gauge, $2.30; 27 gauge, $3.50; 28 gauge, $3.70; 29 gauge, $4; 30 gauge, $4.50; Thirty-six inch wide on No. 20 and lighter, 20c per 100-lb. advance. On 48 inch wide material, 16 gauge, $3.60; 18 gauge, $3.90; No. 20 gauge, $4.55.

Corrugated, 2½ inch, painted, No. 28 gauge, $2.15 a square; galvanized, $3.25 per square. Sheet copper, 21c base. Solder, warranted, 50-50, at 20c lb.

CHICAGO HARDWARE MARKET.

A decrease in new business on wire products is looked for during the first three weeks of November, after which it is expected that marked activity will be resumed. Prices on almost all wire products are firm and in some lines notably, wire nails and smooth fence wire, many mills have sold their output till the end of the year.

General hardware continues to meet a ready market in spite of the lateness of the season. There is an especially heavy demand for all of the higher grades of enamel and tinware. The cheap products in these lines are not so much in evidence, a fact which would indicate that the heavy business is coming from those who are not in actual need of these products. In this and in other ways, the situation when analyzed, seems to indicate that farmers and other consumers are well supplied with the coin of the realm and are not disposed to put up with worn or damaged hardware products. The leading jobbers in the East and West report that their sales during October were equal to or higher than the sales during August and September. It will be remembered that both of these months showed better records than the corresponding months of 1904. The demand for cutlery, for sleds, sleigh bells, horse blankets and similar winter specialties is very heavy. There is also a heavy demand for wagon and implement hardware.

Carnauba wax has again advanced, and No. 3 North Country, subject to cable confirmation, is 32c per lb., ex. dock New York, for prompt shipment from Hamburg.

Manufacturers' prices on stamped pieced japanned and galvanized ware are slightly ragged, owing to a discontinuation of the attempt by producers to regulate the market. There is no serious demoralization, but a decided tendency toward independent effort. Heavy hammers, sledges, etc., are stronger, and the manufacturers seem to have gotten the situation well under control. Prices on linseed oil have been reduced three cents per gallon within the last week. Spirits of turpentine have advanced. The market on window glass is weak and the demand slight. It is reported that The American Glass Company is making price concessions.

METALS.

Orders for delivery of electrolytic copper during January, February and March of next year on a basis of 16½c are being made. Few contracts are being made for delivered during the remainder of the present, owing to the scarcity of existing supplies. On the few tonnages that are being sold, a price of 16¾c for small lots is being asked and given. Lake copper is well maintained at 17c and casting grades at 16¾c.

It is stated officially that the shipments of pig tin from the Straits to this country, London and continental Europe during the entire month of October, amounted to three thousand nine hundred tons with more than five thousand tons during the corresponding period of last year. London pig tin operators continued their buying operations on a heavier scale, when this news was published, and another sharp advance was brought about. In New York prices were raised about fifteen points from 33c to 33.15c. At the higher prices, some small orders were booked.

The demand for tin plates has increased and prices are now well maintained. London prices were advanced, but are now steady on a basis of 13s, f. o. b. Swansea.

Supplies of spot electrolytic lead are scarce and only a few small lots could be obtained at from 5.20c to 5.40c. Ordinary brands of soft Missouri lead are held at 15.15c in St. Louis. Quotations made by the American Smelting & Refining Company on nearby shipments from the mines in lots of fifty tons and over are 4.80c for desilvered and 4.90c for corroding, at Chicago.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes, 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$18 50
North'n Coke Fdy., No. 1	18 50@ 19 00
North'n Coke Fdy., No. 2	18 00@ 18 50
North'n Coke Fdy., No. 3	17 50@ 18 00
Northern Scotch, No. 1	18 50@ 19 00
Ohio Strong Softeners, No. 1	18 30@ 18 80
Ohio Strong Softeners, No. 2	17 30@ 17 80
Southern Silvery, 4 to 6 per cent Silicon	18 15@ 18 65
Southern Coke, No. 1	18 15@ 18 65
Southern Coke, No. 2	17 65@ 18 15
Southern Coke, No. 3	17 15@ 17 65
Southern Coke, No. 4	16 90@ 17 40
Southern Coke, No. 1, Soft	18 15@ 18 65
Southern Coke, No. 2, Soft	17 65@ 18 15
Southern Gray Forge	15 65@ 16 15
Southern Mottled and White	15 40@ 15 65
Malleable Bessemer	18 00@ 18 50
Jackson Co. & Ky. Silvery 8% Silicon	19 80@ 20 80
Jackson Co. & Ky. Silvery 10% Silicon	20 80
Alabama Basic	18 15@ 18 65

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$2 55
No. 18-20 per 100 lbs.	2 60
No. 22-24 per 100 lbs.	2 65
No. 25-26 per 100 lbs.	2 70
No. 27 per 100 lbs.	2 75
No. 28 per 100 lbs.	2 85
No. 29 per 100 lbs.	3 05

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4 60
No. 26 per 100 lbs.	4 70
No. 27 per 100 lbs.	4 80
No. 28 per 100 lbs.	4 90

SMOOTH STEEL.

Wood's Smooth, No. 20	$2 90
" " No. 22-24	2 95
" " No. 25-26	3 00
" " No. 27	3 05
" " No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

Dickey Planished Sheet Steel ... 8½c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs	$3 20
Nos. 18 & 20, per 100 lbs	3 35
Nos. 22 & 24, per 100 lbs	3 50
No. 26, per 100 lbs	3 70
No. 27, per 100 lbs	3 90
No. 28, per 100 lbs	4 10
No. 30, per 100 lbs	5 00
Nos. 22 & 24 x 36 in., per 100 lbs	3 70
No. 26 x 36 in., per 100 lbs	3 90
No. 27 x 36 in., per 100 lbs	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½ per lb.	20½c
Commercial ½ & ½ per lb.	19c
No. 1 Plumbers	17½c

SHEET ZINC.

600 lb. Casks ... cases, per cwt.	$7 90
300 lb. Casks ... per cwt.	7 95
Broken ... per cwt.	7 70

COPPER.

Copper ... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c

Sheet.

Full coils ... per 100 lbs.	$7 00
Cut coils ... per 100 lbs.	7 25

HARDWARE.

ADZES.

Carpenters'.

Ajax	35&15%
Blood's	40&2½%

Coopers'.

Barton's	20%
White's	15%

Ship.

Ajax	33⅓%
Blood's	37½%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L. Waterproof, 1-10s	40c
G. D.	35c
Eley's	52c

Cartridges.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol and Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs. 22 cal.	$1 24
Peters Blank Ctgs. 32 cal. C. F.	4 00
Peters BB Caps, Round ball	1 50
Peters BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%

Primers.

Berdan Primers	$1 00
Peters Primers	20%
Winchester Primers	20%

Shells.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Ideal Empty	25&7%
Peters Target and High Gun Smokeless	40&5%
Peters Premier and Ideal Smokeless	40, 10, & 10%
Peters Loaded Shells, League	40%
Peters Referee Semi-Smokeless	40&2½%
Winchester Blue Rivals	33⅓ & 11%
Winchester Yellow Rivals	33⅓ & 11%
Winchester Repeater	40&5%
Winchester Leader	40-10&10%
Winchester Loaded Shells, Black Powder	33⅓ & 11%

Gun Wads—per 1,000.

Peters Gun Wads ... 18%

Powder.

		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's "	50-lb. drum	22 45
" "	25-lb. kegs	11 35
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 90
Buck Shot, 25-lb. bags, per bag	1 90
Chilled Shot, 25-lb. bags, "	1 90

ANCHORS.

Expansion Screw Anchors ... 10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper ... 33⅓%

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nut	60&10&5%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	33 50
Post Hole.	
Digwell, 8-inch ... per doz.	12 50
Iwan's Post Hole and Well	40&5%
Iwan's Vaughan pattern, 4 to 9-in., per doz.	6 00
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40 5%
Snell's, " " "	40-5%

AWLS.

Brad.	
Handled ... per doz.	$0 28
Shouldered, assorted, 1 to 4, ... per gro.	95
Patent asst'd, 1 to 4 "	90
Harness.	
Common "	1 10
Patent "	90
Peg.	
Shouldered "	95
Patent "	40
Scratch.	
No. 2, handled "	4 80
No. 1, socket handled ... per doz.	1 15
No. 20 Hurwood "	2 00
Sewing.	
Common ... per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Camp Fire, 3 lb ... per doz.	$6 25
" " 4 lb., freighters', ... per doz.	7 85
Cast Steel, good grade, "	6 25
Pioneer "	6 75
Broad.	
Peerless	40-10&5%
Red Warrior ... per doz.	$22 50
Firemen's (handled) "	13 00
Single Bitted (handled).	
Gladstone, 3 to 4 lbs., per doz.	$10 75
Hunt's " " "	9 00
Lippincott's " " "	9 00
Mann's " " "	9 00
Pioneer " " "	9 75
Valley Forge " " "	9 00
Maricopa " " "	7 50
Single Bitted (without handles).	
Gladstone, per doz. 3 to 4 lbs.	$8 50
Hunt's " "	7 00
Lippincott's " "	6 75
Mann's " "	9 50
Pioneer " "	9 50
Valley Forge " "	8 75
Maricopa " "	6 70
Double Bitted (without handles).	
Lippincott's, 3 to 4 lbs. per doz.	$9 22
Mann's " "	9 50
Pioneer "	9 25
Valley Forge " "	9 25

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	30%

BARS, CROW.

Pinch or Wedge Point ... cwt. $2 95

BASKETS.

Clothes.	
Small Willow ... per doz.	$5 75
Medium " "	6 50
Large " "	7 25
Galvanized Iron. ½ bu. 1 bu. 1½ bu.	
Per doz.	$4 00 5 50 7 00

BEATERS.

Carpet.	
Rattan ... per doz.	$2 40
Raymond's Steel Wire "	80
Woven Wire, No. 4 "	1 10

Egg. Per doz.

o. 60 Imp. Dover	$0 60
No. 75 " "	65
No. 100 " "	75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 152 " " hotel tin'd.	1 75
No. 200 " "	80
No. 202 " " tinned	90
	Each
No. 300 " " mammoth.	2 50

BELLOWS.

Blacksmiths'	70%
Hand.	
8 inch ... per doz.	$6 84
10 inch "	8 40
Molders'.	
12 inch "	13 00

BELLS.

Call.	
2½ in. nickeled bell ... per doz.	$1 85
2¾ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell ... per doz.	17 00
4½ in. nickeled brass bell and base ... per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic ... per doz.	$9 50
Rotary.	
3 in. bronzed iron bell "	5 35
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	70, 10&5%
Farm, lbs.	40 50 75 100
Each	$1.10 1.30 1.85 2.65

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40&5%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	72½%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	50&5%
New Jenning's	50, 10&10%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" " Large " $36.00	30%
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger pattern Car	40&5%
Center	40&10%
Countersink.	
Wheeler's ... per doz.	$1 30
American Snail head. "	70
" Rose " "	80
" Flat "	70
Buck Bros.' Flat "	2 65
German "	70
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	50&5@50&10%
German Pattern ... per doz.	$0 48
Gouge "	80
Spoon "	80
Countersink "	1 30
Reamer.	
Buck Bros.' ½ Round "	2 75
" " Square "	2 50
Standard ½ Round "	75
" Square "	75
German Octagon "	75
Screw Driver.	
Round Shank "	[illegible]

Round Shank, extra..
quality ..... " 1 40
Square Shank ..... " 1 10

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in.....60&5%
Clock Spring.....60&5%
Star 15%

Hack.
Disston's .....35&5%
Griffin's.....35&5%
Star 15%

Wood.
Jackson's .....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
No. 11 ..... 6 40
W. M. & Co.'s No. 20..per doz. 5 50

BLOCKS.

Snatch.
Wooden .....55&10%
Steel .....40&10%

Tackle.
Wooden .....70&5%
Steel .....50, 10&5%

BOARDS.

Stove.....40%

Wash.
Globe .....per doz. $2 55
Banner..... " 2 90
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate ..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
8½ oz. iron.....per doz. $0 65
1½ lb. " ..... " 1 60
2¾ lb. " ..... " 1 80
13 oz. lead ..... " 3 00
6½ oz. brass..... " 3 20

BOLTS.

Carriage, Machine, Etc.
Carriage ⅝x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ⅝x6 .....70&5%
Machine, ⅝x4 and sizes smaller and shorter.....75&5%
Machine, sizes larger and longer than ⅝x12.....70&5%
Machine, longer and larger than ⅝x12.....70%
Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire .....75&10%
Wagon Box Strap .....70&10%

Mortise Door.
Gem.....50&10%
Ives'.....50&10%

Barrel.
Cast 50%
Wrought .....50&5%
" Bronzed.....75&5%

Flush.
Wrought, B K .....40&5%

Spring.
Wrought .....75&10%
" Brass .....75&10%

Square.
Cast.....40%
Wrought .....60-10&10%

Tire.....75&¼%

BORERS.

Angular.
Miller's Falls.....per doz. $13 75

Bung.
Common ring with handle.
Inches..... 1½ 1¾ 2
Per doz.....$6.25 7.25 8.50

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2 00 each..25, 10 & 2½%

BOXES.

Mail, No..... 5 10 20
Per doz..... $3.50 10.50 13.00

Miter.
New Langdon.....15&5%
Olmsted's 10%
Stanley's.....30%
Seavey's .....each $1 30

BRACES.

Barber's .....50&10&10@60&10%
Fray's Genuine Spofford's.....60%
..Fray's No. 70 to 120, 81 to 123, 207 to 414.....60%
C. E. Jennings & Co.....50&5%
Mayhew's Ratchet 60%
Mayhew's Quick Action Hay Pat. 50%
Miller's Falls Drill Braces.....25%

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 75
" No. 2 " 10 50

Shelf.
Cast Iron, Japanned.....50, 10, 5%
Stanley's Wrought Steel 70-10&2½%
Wire .....80, 10&5%

BROILERS.

Wire.....70&10%
Crown, Self-Basting, No. 80. doz. $2 16

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85
" side-strap, plain " 3 85
" " swivel " 4 95

BUCKS, SAW.

Folding .....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright—Nos. 800, 804, 808, 810, 814 and 834..75-10&10%
Nos. 838, 840 and 842....75-10-10&10%
Nos. 822 and 823.....85-10&7½%
Wrought Steel, Japanned.
Nos. 721 and 727.....70-10-10&10%

CALIPERS.

Double .....60&12½%
Inside and Outside.....60&5%
Wing.....60-10&10%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock.
Gallons.... 15 20 30 40
Per set.... $2.85 $3.05 $3.25 $4.40

Milk.
Elgin Pattern.
Nos..... 808 810
Gals..... 8 10
Per doz..... $18.00 $23.80

New Elgin Pattern.
Eureka Pump, 5 gal.....$7 85
Wood Jacket.....70, 10&10%
Nos..... 105 108 110
Gal. each .. 5 8 10
Per doz.... $13.75 $15.00 $14.75

Iowa Pattern.
Nos..... 608 610
Gal 8 10
Per doz..... $18.00 $19.20

New York Pattern.
Nos..... 908 910
Gal. each..... 8 10
Per doz..... $22.15 $23.00

Oil and Gasoline.
1 Gal. glass, Daisy....per doz.$1 80
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1.45 $2.40 $3.35
Per doz.
Sterling Tilting, 5 gallon.....$ 8 00
"High C" Pump, " 12 00
Eureka Pump " 9 25
Wooden Jacket.....60&10%

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....33⅓%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list. .....60&5%
Philadelphia Plate, new list..65&10%
Martin's.....50-10&5%
Payson's.....70&10%
Tucker's, Wood & Iron Wheel.25&5%
" Rubber Wheel.....15%

CATCHERS, GRASS.

Bieder's No. 1.. .....per doz. $5 75
Eureka ..... " 4 25
Ideal No. 4..... " 10 50

CHAIN AND CHAINS.

Breast Chains.
Doubleslack .....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
5/16 in. $7.25; ⅜ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ¼ 7/16 ⅜
Per 100 lbs.. $9.30 $6.50 $5.40 $4.60
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.. $4.40 $4.30 $4.15 $4.05
Inch..... ⅞ 1 1¼
Per 100 lbs.. $4.00 $4.00 $4.10

Cable Log Chain.
Advance 35c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph, " 30%

Picture Chains.
Light Brass, 3 ft.....per doz. 63c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5 25

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch ..... ½ 9/16 5/8
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
5/16 in. $8.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's .....70&10%

Trace Chains.
Western Standard.
6½— 6-2..... ...per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 33c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1 ..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blunt 30%
Blum-Jap'd, $6.25; Brzd., doz....$7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality.....per lb 10@19c

Socket, Framing and Firmer.
Barton's.....20%
For beveled back, add per doz..60c

Tanged, Firmer.
With handles, add per doz.....60c

Choppers, Enterprise Meat.
No. 12.....$2 10
No. 22..... 3 40

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.15 $4.40
Belle, Barrel. 70%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....70%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz. .33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.50 doz.
Wentworth's.....40%

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.90
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire..... per doz. $0.50

Side-walk.
Steel..... per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Ajax, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25

CLEVISES.

Malleable ....per lb 3½c

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c
Hame..... " 20c

CLOTH.

Emery.
Ajax..... 50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 2 70
7 and 8 " " " " 4 25

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....70-5%
Compression Lock C'ks(n'w list)..70%
No. 65 Brass Liquor Cocks, doz.. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz... $0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list)....70%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $1.60 $2.00 $3.00
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 2.40 2.60 3.60

COMBS, CURRY.

Nos . 000 20 321 330 417 416
Per doz.$0.32 .80 .90 .95 .80 1.00
Nos 531 533 530 535 545 990
Per doz.$0.96 1.20 1.10 1.85 1.40 1.30

COMPASSES.

Carpenters'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb .....per lb 28c
1½ lb..... 28c 2 lb.... " 25c
3 lb and larger..... " 23c

CORD.

Picture.
White Wire .....80-10&5%

Sash.
Baltic Braided Flax.....per lb 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUNTERSINK.

Buck Bros. Flat.....per doz. $2 65

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.00

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 100, list, $18.00 ..... 40&10%
Nos. 2 and 4 ..... 25%
Universal... Nos. 1 2 3
Per doz $10.50 $12.50 $17.00
Smith & Hemenway Co 25%
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 85
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 25
Eagle ..... " 5 75
Eureka ..... " 6 25
Hercules ..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $6 85
1⅛ in. " " " 7 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 11 50

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60% & 65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz.. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Ajax ..... 70&5%
Champion 45%
" Pattern ..... 60, 10&5%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co ..... 40&5%

EAVE TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern ..... 80&5%
Central ..... 75&10&10%
Southern ..... 75&12½%
S. Western ..... 75&5%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
5-inch ..... each 60c; per doz, $6.70
6 " ..... " 70c; " 8.00
75% discount to dealers on 2-inch 3-inch and 4-inch plain, round and round corrugated elbows.
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. $0.40 $0.52 $0.80
Pol'd " .80 1.00 1.20
Plan'd " 1.20 1.40 2.40

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour ..... " 5c 3c 3c

ENAMEL, IRON.

English, ½-pt. cans ..... per doz. $1 50
Nubian " " ..... " 1 80
Peerless 1 50

EXTRACTORS, PIG.

See Forcips, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 55%
Iron ..... 65&5%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 1 40
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Black Diamond ..... 70&10%
Disston's ..... 75&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel ..... 90&2½%
Wood, 4 tines, per doz $3.25
Coal, Coke, Cottonseed 60%
Hay,
Diamond, 2 tine ..... 60&10%
" 3 " 70%
" 4 " 50%
Golden Eagle, 3 tine 75%
" " 4 " 80%
Digging ..... 70&10%
Scoop 50%
Header.
Diamond, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Diamond, 4 tine ..... 70&10%
Golden Eagle 90%
Ore 40%
Spading.
Diamond ..... 80&10%
Golden Eagle ..... 80, 10&5%

FRAMES.

Hack Saw.
Crown ..... per doz. $6 25
Miller's Falls ..... " 10 20
Star ..... " 2 85

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.20
White Mountain.
20 qt., New Platform... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power. " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s... 20&10&2½%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%@50&10&5%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 98&15%
Above " " 90%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Eagle 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 95&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. $5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing.. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie ..... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's ..... 40&10%
Engineers'.
Maydole's ..... 40&10%
Farriers'.
Maydole's ..... 35&5%
Machinists'.
Maydole's ..... 40&10%
Nail.
Ajax ..... per doz. $4 00
Calumet ..... " 3 15
Cast ..... per doz. $1 10@$4 10
Maydole's ..... 40&5%
Vulcan ..... 45&5%
Riveting.
Maydole's ..... 35&5%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 53
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs ..... 80&10%
5 lbs. and over ..... 85&5%
Masons'.
Single & Double Face ..... 70&10%

HANDLES.

Auger.
Common Assorted ... per doz. $6 38
Peck's Adjustable ... " 2 10
Roger's " ... " 4 25
Ives' " ....per set 1 35
Axe 60%
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted, 18c; Large, 22c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 48c
Blacksmiths' ..... per doz. 55c@80c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 45c
Hay and Manure Fork ..... 40&5%
Hoe and Rake ..... 40&5%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 40%

HANGERS.

Barn Door.
Monarch ..... 60&10%
"Never Jump" Hinge ..... 50&10%
Peerless, Loose Axle ..... 60&10%
Perfection, Roller Bearing .. 70&5%
Phoenix, Roller Bearing ..... 70&5%
Prouty, No. 315.. per doz. prs. $6 35
Rival ..... " " 3 65
Superb ..... " " 5 50
Safety Flexible . " " 6 35
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Conductor Pipe.
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $9 35
Imperial 30%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Ajax 45%
Blood's 50%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling .... " $0 95@1 20
Duffy's Barrel ..... per doz. $15 00
Germantown 60%
Hammond's 40%
Roger's Ideal ..... per doz. $5 25
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1 .... per doz. $ 9 75
" No. 2 .... " 10 50

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor .. 35%
Bommer Bros. Spring Hinges .. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $8.40
Oxford 20%
Wrought Iron.
New Lists .....
Light Strap Hinges ..... 70&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 65&5%
Heavy T Hinges ..... 70-10&5%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap 80-20-10-10-10-10&5%
Cor. Ex. Heavy T 80-20-10-10-10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 65
14 to 20 in ..... " " 3 40
22 to 36 in ..... " " 3 15
Screw Hook and Eye.
¾ in ..... per 100 lbs. $6 55
⅝ in ..... " " 7 60
½ in ..... " " 9 45

HOES.

Garden ..... 70&15%
Grub.
Ajax ..... 60 & 10%
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 70&15%
Mortar ..... 75&10%
Planter's Eye 62½%
Weed ..... 75&5%

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle
..... per doz. $7 00@$8 65
Hamilton Pattern.....per doz. 7 35
Chain.
Inch... 1/4&5/16 3/8 7/16 1/2
Per 100 $7.60-8.10 9.75 11.50 13 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....75&10¢
Conductor.
Malleable.....50&10¢@55&10&5¢
Wrought .....40&10¢@50¢
Corn.
Common, unpolished, per doz. $1 40
" polished.... " 1 80
"Cut Easy"..... " 2 75
Clyde's..... " 2 20
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.75 1.80 1.90
German.....per doz. 1 90
Little Giant..... " 2 90
Wood's..... " 1 30
Hammock.
With Plate.....per doz. 33c
With Screw..... " 33c
Lambrequin or Drapery, per gro. 21c
Picture .....50¢@50&10¢
Potato and Manure.....65&15¢
Screw.
Brass.....80&20¢
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.
Ever Ready .....per case $1 70

HOSE, GARDEN.
3 ply ½ in. 35 lb. pressure per ft....4½c
3 " ¾ " 50 " " " 6½c
3 " ½ " 70 " " " 6½c
3 " ¾ " 70 " " " ....8 c
4 " ½ " 80 " " " ....8 c
4 " ¾ " 80 " " " ... 9½c
6 " ¾ " 125 " " " ...10½c
8 " ¾ " 150 " " " 12c
Cotton ¾ in. 75 lb. pressure per ft. 6c
" ¾ " 150 " " " 8c

HUSKER.
Boss.
Nos..... E A B
Per doz.....$1.85 2.05 2.05
Nos..... P PX
Per gro $5.40 4.50
Nos.....2000 3000
Per gro.....$3.00 6.75
Nos..... 4000 O OX
Per doz.....$1.15 1.85 1.35
Brinkerhoff's.
Per gro.....$14 50
Ideal.
Nos..... 102 101 100
Per doz.....$1.35 2.50 2.75
Johnson's.
Per gro.....$7 75

IRON.
See Metals—First column.

IRONS.
Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list) 25&5¢
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 10
" Nickel plated, " 4 20
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 83c
No. 55 T, " ... " 79c
No. 50, Howells..... " 72c
No. 55, " ..... " 69c
Tailors' Sad.....per lb. 4½c
" Geese..... " 4½c
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.
Locomotive.....75&5¢
Wagon.
Meekers'.....per doz. $11 00
Miller's No. 2..... " 7 75
Winner ..... " 7 75
Smith & Hemenway Co .....35¢

KETTLES.
Brass.....15¢
Caldorn .....45¢
Copper.....per lb. 27c
Maslin .....66⅔¢
Sugar .....50&5¢

KNIVES.
Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15¢
Corn.
Ajax.....per doz. $2 10
Drawing.
Standard .....70¢
Adjustable.....15¢
Barton's Carpenters'.....10¢
" Folding Handle....25&5¢
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 7 75
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point " 8 75
Hedge.
Ajax, Heavy.....per doz. $6 25
" Extra Heavy.... " 8 40
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 0
Putty.
Common..... " 84
Goodell's.....per doz. $1 30@1 80
Russell's..... " 1 75@2 25

KNOBS.
Door.
Mineral .....per doz. $0 75
Porcelain ..... " 83
Jet..... " 83

LADDERS.
Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
I X L, per ft 19c

LANTERNS.
Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2½-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Berger.....40&10&5¢

LEADERS, CATTLE.
Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.
Cut.....50&5¢
Slaes.
Ex. Quality.....per sq. ft. 20c

LEATHERS, PUMP.
Valve and Plunger .....50¢

LIFTERS.
Stove Cover.
Japanned .....per gro. $2 65
Coppered..... " 3 65
Devore's..... " 5 50
Zero..... " 4 00
Transom.
Payson's.....70&10¢

LINES.
Chalk.
Twisted in 20-ft. hanks.
Nos..... 15 14 13 12 11
Per doz..... 9c 12c 16c 21c 28c
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2
Per doz 22c 25c 31c
Masons', in 100-ft. hanks..doz... 80c
Clothes.
60-ft. Jute.....per doz. $0 80
72-ft. " ..... " 1 00
60-ft. S'sal ..... " 1 30
72-ft. " ..... " 2 00
50-ft. Cotton ..... " 75
50 ft. Braided Cotton. " 80

LINING, STOVE.
In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Ajax.....per doz.	$5 00	$6 25
Angular.... "	3 00	4 40
Boss ..... "	4 00	5 20
Upright.... "	2 50	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $0 00
Excelsior..... " 2 00
Handy ..... " 2 00
Little Giant..... " 3 00
Pony, Pomeroy..... " 7 20
Washing.
Boss 1 2 5
Per doz.....$54.20 56.20 65.20
Globe, No. 1 .....per doz. 49 00
O K Rotary..... " 51 50
Round Wayne..... " 22 50
U. S. Steel..... " 52 00
Advance, f.o.b. Chic'go " 21 50

MAIL BOXES.
See Boxes.

MALLETS.
Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 80
Hickory Sheet Iron.. " 1 30

MATS.
Door.
National Rigid.....50, 10&5¢
Queen Flexible.....50¢
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex.
Heavy .....per doz. 1 00

MATTOCKS.
Ajax.....65&10¢
Extra .....78¢

MAULS.
Iron. lbs. 10 13 16 18 21
Per doz. $2.60 3.20 3.80 4.20 4.65
Wood face, lbs. 10 11 12
Per doz $4.20 4.55 4.85
Wood Choppers'.
Lake Super'r & Oregon Pat. 80&10¢

MEASURES.

	½ pk.	1 pk.	½ bu.
Galvanized, per dz.			$4 25
Japanned... "	$1.40	2.10	2.60

METAL.
Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.
First Quality.....25¢
Second Quality.....35¢

MILLS, COFFEE.
Enterprise .....25¢
Parker.....50¢
Arcade .....50¢

MITRE BOXES.
See boxes.

MOPS.
Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.25 2.65 3.25

MOWERS, LAWN.
Ball-Bearing.
Inches..... 15 17 19 21
Each $7.50 8.50 9.50 10.50
Cheap Grades.
Inches..... 12 14 16 18
Each $2.30 2.35 2.35 2.50
Clipper .....50, 10&10¢
Girard.
Inches..... 14 16
Each.....$3.25 3.50
Philadelphia.
All Styles Except A & E 60, 10&10¢
Style A.....50&10¢
Style E, High Wheel..60,10,10&10¢
Drevels.....50¢
All Day.....Net Price

NAILS.
Cut Steel.....rates, $2 00
Horse Shoe.
Ausable .....55&5¢
Capewell ..... 15¢
Perfect .....55&5¢
Putnam .....20-5¢
Star .....50¢
Picture.
Brass Heads .....60&10¢
Judd's.....60&10¢
Brads.....90, 10&10¢
Furniture .....75&10¢
Wire.
Small Lots.....$2 00
Carload " 1 95
Cement Coated..... 1 75

NAIL PULLERS.
See Pullers.

NAIL SETS.
See Sets.

NETTING, POULTRY.
Galvanized Before Weaving..80&15¢
" After Weaving...80&15¢
Cut Pieces.....65&5¢

NIPPERS.
End Cutting.
Stubb's Pattern.....80&10¢
End and Diagonal Cutting.
Swedish Side.....75¢
Utica Drop Forge & Tool Co...60¢
Hoof.
Heller's .....55&5¢
V. & B.....55-5¢

NOZZLES.
Hose.
Gennine Boston.....per doz. $1 05
Genuine Gem..... " 3 15
Magic..... " 3 15

NUTS, HOT PRESSED.
Square Blank.

In.	½	⅝	¾	⅞	1	1¼	1½
lb.	9c	6c	4c	3½c	3¼c	3¼c	3c

Square Tapped.

In.	½	⅝	¾	⅞	1
lb.	12c	7½c	5c	4½c	4c

For 5 lb. boxes add ½c per lb. to above prices.

OILERS.
Chase Pattern
Brass and Copper.....50¢
Zinc .....75¢
Engineers'
Cannon .....55¢
Tin.....per doz. $2.00@$2 25
Machine.
Ajax.....per doz. $0 60
Copper Plated Steel.. " 1 30
Malleable Iron.....60, 10&5¢
Tin.....per doz. 35c@45c

OPENERS.
Box.

Inches.....	10	12	14
Flat per doz	$2.85	3.60	4.15
Round "	2.10	2.25	2.75

Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.
Combination .....per doz. $11 50
Economical..... " 4 90
Family..... " 10 50

PADLOCKS.
Standard Wrought .....70, 10&5¢
Champion .....50¢
Eureka.....40, 10&5¢
Yale .....60&5¢

PAILS.
Cream.
14-qt., without Ga....per doz. $2 65
20-qt., " " .... " 3 25
20-qt., with Gauge.... " 4 00
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00
Water.
Galvanized, qts 10 12 14
Per doz $1.75 1.95 2.25
Wood.
Cable, 2 Hoop.....per doz. $1 90
" 3-Hoop..... " 2 10
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 50
" 3-Hoop..... " 1 70

PANS.
Dripping.....80&10&5¢
Fry.
Common.....80&10&5¢
Acme.....90&5¢
Roasting.
Brownie.....each 18c@26c
L. & H..... " 40c@51c

PAPER
Building.
Plain .....per 100 lbs. $1 00
Tarred..... " 1 05
Tarred Felt..... " 1 20
Diamond A, Red Rosin, pr roll 40
Leader, Red Rosin..... " 35
Sand and Emery.
Ajax.....70&10¢
B. & A.....70&5¢
Wrapping.
Grecian Express.....per lb. 2½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 5 70
White Mountain .... " 4 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Ajax Railroad.....60&10%
Extra Railroad .....70&5%
Surface.....65&5%

PINCHERS.

Carpenters', wrought iron, pol. steel jaws 30%
Blacksmith's 45%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.

Territory.	Nested.	Not Nested
Eastern.....	70&15%	70&10%
Central.....	70&7½%	70&2½%
Southern	70&2½%	60&20%
Southwestern..	60&20%	60&10%

Lead.
Full coils.....per ℔. 6½c
Cut " ..... " 6½c

Stove.

Acme—In.	5	6	7
Smooth, per jt..	8½c	9½c	10½c
Planished " ..	32 c	33 c	43c
Peerless—Smooth.	7½c	8 c	9½c
Polished	14½c	15½c	18c
Plan'hed	28 c	31 c	35½c

Made-up—In.	5	6	7
Smooth	7½c	8c	9½c

7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Wrought Iron Gas Pipe
⅛@¼-in., black.....discount, 60%
⅜@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@¼ " galvanized " 42%
⅜@½ " " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Siegley Iron Bench.....50&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.40 $2.80 $3.70 $4.60

Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.00 $2.30 $3.20 $4.10

Cutting.
Bernard's.....40%
Lodi.....60&10&5%
4 Tube, revolving..... " 4.25

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$7 80
Russell's..... " .. 8 00

Flat and Round Nose.
Bernard's.....40%
German 65%
Lodi.....55%
Paragon.....50&10%

Gas—In. 8 10 12
Per doz.....$3.00 $4.00 $4.00

Tinner's.
Hollow.... .....
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%
Stanley's.

Nos.	00S	0S	2S	3S
Per doz..	$4.65	$5.20	$7.60	$8.65
Nos.	30	25	50	35
Per doz.	$13.25	$17.75	$17.75	$12.35

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'l's " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLES—FISHING.

Bamboo.

Ft.	12	18
Per. 100	$2.00	$6.00

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.

Pts.	1-6	¼	½
Per doz.....	$0.80	$1.10	$1.65

Pts.	1	2	4	8
Per doz	$2 75	$4.50	$7.50	$12.50

White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine

Pts.	1-6	½	1	2
Per doz.....	$0.70	$1.35	$2.25	$3.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00
Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 75
Paste, 5 oz. cans....per doz. 75
Paste, 6 oz. cans.... " 75
Paste, ½ pt. cans.... " 1 00
Black and Japanned—
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.. " 1 75
Blackene, 1 ℔ cans....pr gro 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, 75@85c
Square, 1½ qt..... " $1 00
Square, 2 qt..... " 1 00
2 qt. Reversible..... " 1 20

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem..... " 6 75

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....35%
Henis .....per doz. $1 80

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80,10&5%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....45%
Giant Pattern per doz.....$5 00
Tack—Giant..... " 55
Staple 65%

PULLEYS.

Awning—Jap'd.....40&5% to 35&5%
Clothes Line.....30&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 65
Wood Wheel, 6 in.... " 1 50
Wood Wheel, 6 in., pass knot..... " 2 00
Hot House—Jap'd .....45&5%
Screw..... " .....45&5%
Side ..... " .....45&5%
Sash.
Clark's..... " 36
Common Sense, 2 in .. per doz $0 22
" Pattern, 2 in.. " 18
Empire..... " 20
Ideal..... " 18

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$.90	1.00	1.10	1.40

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 40
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 35
Commercial..... "

RAIL.

Barn Door.
Light Wrought.....per ft. 2½c
Safety..... " 4½c
Single Flange ..... " 1½c
Smith's Wro't Bracket, plain 3½c
Smith's Special 4½c
Smith's "Never Jump".....11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel, braced.....90&10%
Steel, bow.....80c
Malleable Iron, heavy.....90&10&5
Hay.
Wood.....$1.00@$1 60
Lawn—Wood.
Common.....per doz. 2 05
Automatic ..... " 5 45
Gibbs'..... " 3 20
Jumbo, 36 teeth..... " 6 00

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned. .70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.

Copper.....	2-in.	2½ in	3 in.
Per doz.....		$1.00	$1.20
Rea's Impro'd Self Piercing copper, pr d'z.	1.50		
Steel per doz..	.95	1.05	
Nickel Plated	1.35	...	

and Ringers—Hog.
Blair's Rings .....per doz. $0 45
Blair's Ringers..... " 60
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 45
Hill's Ring, boxes..... " 40
Major Rings ..... " 60
Perfect Ringers..... " 80
Wolverine Rings..... " 1 30
Wolverine Ringers... " 60
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 33c
Ball, Round..... " 22c

RIVETS.

and Burrs.
Copper Belt .....50&5%
Coppered Iron 75%
Tinners' .....66⅔@10%
Hame ....per ℔. $0 00
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels..per ℔. 11½c
¾, 5-16-in. Com. in coils .. " 12c
¼, 5 16 Imperial in coils . " 21c
Sewall & Day Sisal Rope.
Rates..... 9½c
Sisal.
Eagle, rates.....per ℔. 7½c
Pure Manila.
Rates..... " 11½c

RULES.

Boxwood.....70%
Ivory .....45&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's .....25&7½%
Jackson's.....25&7½%
Butchers'.
Disston's.....25&7½%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz. $1.35@$1.60
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35%
Disston's..... 40&10% &50%
Pocahontas Bit.....per ft. 30c
Pocahontas, Blued..... " 41c
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Disston's.....25½%
Keystone.....30%
Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb. .....30&7½%
Keystone.....30&7½%
Sam Sickles', hand....per doz.$4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
Keyhole—Disston's.....25&7½%
Kitchen.
Sterling.....25%
One Man 50%
Panel.
Brown's.....30&7½%
Disston's No. 7.....30&7½%
Disston's No. D100.....25&2½%
"I Will".....40%
Pruning.
Avery's Duplex.....25&7½%
Brown's.....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy..... " 7 60
Happy Medium..... " 7 00
Wood Sawyers' Delight " 8 25

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted.... " 1 60

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 50

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 75
Triangular..... " 2 50
Cabinet.
Ajax.....per doz. $3 15
Cast Steel..... " 65c@75c
Stanley's No. 80..... " $11 50
Road.

Cubic ft.	7	5	3
Without runners, ea.	$4.15	3.90	3.65
With runners.... "	4.40	4.15	3.90

SCREWS.

Bench.
Iron ....60&5%
Wood, white maple..per doz. $3 40
Hand—Wood.....30%
Hand Rail.....80&10%
Jack .....85&10&10%
Lag or Coach—all sizes, gimlet pointed.....75&10%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	18c	20c	26c	30c	23c	25c

Wood.
F. H. Bright Steel.....87, 10&10%
R. H. Blued Steel.....90&5%
F. H. Jap'd Steel.....83⅓&5%
F. H. Brass.....88&5%
R. H. Brass.....90&5%
R. H. Nickel Plated.....80%

SCYTHES.

Clipper, grain.....per doz. $8 15
Clipper, grass ..... " 6 30

SHAVING SETS.
Smith & Hemenway..............60%

SETS.
Nail.
Round, common......per doz. $0 33
Square, " ...... " 42
Octagon " ...... " 33
Square, Buck Bros.. " 1 30
Cup Point, knurled, pr. doz. 70c@$1.20
Rivet.
Farmers'.. ....per doz. $1 45
Tinners'.....................50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever....... " 1 20
Disston's Monarch .. " 6 50
" X Cut...... " 12 00
German .... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 4 25
Leach's.............. " 4 80
Nashe's Hand........ " 3 15
" X Cut........ " 4 20
Stillman's Lever..... " 1 30
" X Cut...... " 2 50

SHARPENERS, SKATE.
Diamond................per doz. $1 60
Smith & Hemenway..............20%

SHAVES, SPOKE.
Iron...............per doz. $1.35@$2.75
Wood............. " 2.75@ 4.75
Bailey's........................50&5%
Goodell's...........................15%
Stanley's Universal............30&5%

SHEARS.
Pruning.
Buckeye, No. 1.......per doz. $5 75
" No. 2....... " 7 40
California Pat.. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3...... " 13 75
" " No. 4...... " 16 50

Henry's Pat.	0	01	14	012
Per doz......	$1.40	$2.10	$2.90	$2.80

Star...................per doz. $4.00
Sheep—No. BBA.

Inches..........	6	6½	7
Reg. Grip......	$11.25	$11.50	$12.00
Nar. Grip, doz.	11.00	11.25	12.25

Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.

Inches............	3	4	5
Per set............	$0.34	$0.42	$0.70

Hatfield's.

Per set...........	.75	1.00	1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union.................... per doz. $6.75

SHIELDS.
Expansion Bolt Shields.......50&10%

SHOES.
Conductor.
5-inch......each 28c; per doz. $ 3.30
6 " ...... " 33c; " 3.90
60% discount to dealers on 2-inch, 3-inch and 4-inch plain, round and round corrugated shoes.

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Ajax............per doz. $5 25
No. 4 Golds........... " 6 25
Ames' new list......Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection...............50%
Railroad, Etc.
Gold Hibbard's.......per doz. $9 25
C. H. Conover's....... " 7 75
Beckwith's............ " 7 75
Hickory................ " 6 25
Greenleaf's............ " 5 75
Columbus.............. " 5 00
Ames' new list......Discount 12½%
Snow.
Per doz.................$1.65@$9.00
Alaska Steel.
D Handle............per doz. $6 00
Long Handle....... " 5 00

SINKS.
Cast Iron.
Painted.......................... 50%
Enameled, White.........60-10&5%
Wrought Steel.
Painted, new list..........40 10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion...........................65%
German Pattern..................30&5%
Judd's Pattern...........60&10%@70%

SNATHS.
Double Ring, Bush.....per doz. $6 75
Patent Loop " .... " 7 30
" " Grass..... " 5 75

SNIPS, TINNERS'.
Hernisch's.......................40&5%
National.........................40&10%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.

Nos........	1	2	3	4
Per doz....	28c	33c	35c	40c

Reliance.
Per doz.....light $1.45; heavy $2.20
Star.
Per doz...... light 90c; heavy $1.35
Torrey's..............per doz. $1.25

Warner's No..........	11	13
Per doz..............	75c	$1.35

SQUARES.
Steel and Iron...................85&5%
(Add for Bluing, $2.50 per doz., net)
Mitre.
Stanley's No. 12.................60%
Try.
Stanley's No. 20, new list...45&10%
" No. 12 and 14.........55%
Try and Bevel.
Stanley's ....55&5%
Try and Miter.
Fox's..................per doz. $5.75
Winterbottom's.................70%

SQUEEZERS, LEMON.
Common Wood.........per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Pearl, nickel plated..... " 1 30
Star, " " ...... " 1 60
Little Giant, tin'd iron. " 4 00
Drum, japanned......... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.
Blind.
Barbed................per ℔ 9¼@9¾c
Butter Tub.............. " 8@8¼
Fence—less than carload.
Polished............per 100 ℔ $2 20
Galvanized.......... " 2 50
Netting.
Galvanized. ....per 100 ℔ 3 70
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples...................85-10&5%
Extra heavy......................85&5%

STEELYARD.
Discount 25%

STONES.
Axe.
Hindostan.............per ℔ 5¾@7c
More Grit............. " 9½c
Washita .... " 17 c
Emery.....................60%@60&5%
Oil—Mounted.
Arkansas Hard......per doz. $23 00
Arkansas Soft....... " 15 50
Hindostan ....per ℔ 6¼@6¾
Oil—Unmounted.
Arkansas Hard.........per ℔ $2 05
Arkansas Soft.......... " 1 10
Lily White............. " 45
Queer Creek............ " 15
Ouachita............... " 38
Washita .... " 26
Sythe.
Black Diamond.......per gro. $7 75
Clear Grit.............. " 4 25
Gem Corundum....... " 7 50
Green Mountain...... " 4 20
La Moille .... " 7 00
White Mountain...... " 6 50
Willoughby Lake..... " 6 25
Red End............... " 3 15

STOPS, BENCH.
Hotchkiss'..............per doz. $3 50

STOPPERS, FLUE.
Common...............per doz. $0 32
Crown .... " 45
Gem, flat, painted...... " 72
Gem, cor'd, decorated.. " 65
Kirch's.................. " 90
Peerless................. " 63
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.
Scoop..............per doz. prs. $1 85
Skate.............. " " 60@70c

STRETCHERS.
Carpet.
Bullard's..............per doz. $3 90
Excelsior............. " 5 25
Malleable Iron........ " 70
Perfection............ " 6 30
King.................. " 4 50
Wire.
N. S. Elwood's....... " 6 00
O. S. Elwood's........ " 6 00
Little Giant.......... " 5 75
Star Lever............ " 6 25
Star Tackle Block.... " 9 25
Warner's............. " 6 25

SWIVELS.
Malleable Iron.............per ℔ 6¼c
Wrought Steel..........per gro. $4 50

TACKS.
American Cut..................90&5%
American Wire............85&25&10%
Bill Posters Cut...............90&40%
Blued Carpet...................90&15%
Tinned Carpet ....80&10%
Gimp.............................90&35%
Upholsters' Cut............90&40&5%
Upholsters' Wire.............90&35%
Double Pointed................90&20%
Copper.....................per ℔ 32c
Canvas Nails....................75&5%
Clout Nails ....75&5%
Hungarian Nails...............80&5%

TAPES, MEASURING.
Asses' Skin........................35%
Bend Leather......................15%
Patent Leather...................15%
Lufkin's Steel.....................25%
Lufkin's Metallic.................25%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case...........per doz. 80c@$1 25
Wood Back........ " $2.00@12 00
Glass................. " 12 00

TIES.
Bale.
Single Loop.................80&10%
All other kinds..................70%
Cow—See "Chains."

TOOLS, SAW.
Atkins' Dexter.........per doz. $4 50
Atkins' Excelsior...... " 6 50
Disston's Universal..............40%
Minature.
Smith & Hemenway 25%

TRAPS.
Fly.
Balloon...............per doz. $0 90
Harper's............. " 1 00
Game.
Newhouse........................60%
New Victor.....................85&5%
Mole.
Reddick's.............per doz. $5 20
Mouse and Rat.
Wood Choker.........per hole $0 10
Tin Choker.......... " 0[illegible]
Delusion..............per doz. 7[illegible]
Imitation Sight, Rat. " 6[illegible]
Marty Rat............. " 6 40
Marty Rat Imitation.. " 3 30
Marty Mouse.......... " 3 00
Marty Mouse Imitation " 1 80
French Automatic.......each 3 30

TROWELS.
Brick.
Standard.......................40%
Brade's......................15&5%
Disston's......................40%
Rose's.........................25%
Plasterers.
Standard 60%
Disston's.......................40%
W. & McP.......................35%

TRUCKS.
Bags ....each $1 70
Handy...................... " 1 50
Warehouse ....60&5%

No.............	1	2	3
Half Ironed....	$2.65	$3.40	$5.00
Full Ironed....	3.90	5.75	6.75

TUBS, WASH.

Standard.				Ex.
Nos.........	3	2	1	large
Per doz....	$4.40	$5.20	$6.10	$ 8.20
Dowell.				
Per doz....	5.30	6.20	7.10	9.30
Cedar.				
Per doz....	6.10	7.10	7.90	10 80
Indurated.				
Per doz....	6.90	7.65	9.30	11.20
Galvanized.				
No................	1	2	3	
Per doz...........	$5.25	$5.75	$6.50	

TWINE.
Per ℔
3-ply Cotton Wrapping.............18c
4 " " " 18c
4 " " Extra Wrappings.... 22c
4 " " " Hvy. Wrappings. 20c
4 " " Wrapping on tubes...22c
3 " " " " cones.. 20c
4 " " " " " ...20c
India Hemp, ½-lb. balls...........17c
" " ¼-lb. " 16c
" " ¼-lb. " ....doz. 63c
2-ply " ¼-lb. " 11c
3-ply " ½-lb. " 10c
Jute Wrappings, ½-lb. balls........11c
Jute Wool, 1-℔. balls...............5c
Seine.

Nos.........	6	9	12	15+
Soft, per ℔	23	20½	20	19
Med. "		20½	20	19
Hard "		21	21	20

Staging, ½-lb. ball, size 21......20½c
" " " " 24.......20c
" " " " 27.......20c
Bagging " " 21c
3-ply "B" in hanks................18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
130-strand 6¾c
200 strand. 7½c

VISES.
Bouney's..............................35%
Cheney's 30%
Parker's Oval Slide.............
.........50, 10, 2½% @ 50 10, 5, 2½%
Parker's Parallel.............18&20%
Parker's Victor...................15%
Parker's Combination............75%
Solid Box......................80&5%
Adam's Mechanics'.........each 2 65
Williamson Universal,............60%

WARE.
Cast-Iron Hollow.
Ground.......................60&10%
Unground ....70&5%
Extra Finished. ....60&10
White Enameled.........60, 10&5%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2¼c
Wrought iron in bulk per ℔.:

In.	¼	⅜	½	⅝	¾	⅞	1
	7½c	5¼c	4c	3¾c	3½c	3¼c	3¼c

Wrought steel in 5 ℔. boxes, per ℔.

In.	¼	⅜	½	⅝	¾	⅞	1
	8¾c	6¼c	5c	4¾c	4½c	4¼c	4¼c

WASHING MACHINES—See Machines.

WEDGES.
Ax.......................per doz....30c
Galling ....per ℔ 10¾c
Saw .... " 8¼c

WEANERS.
Calf.
Fuller's, per doz......$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz .... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz....... 3 10 and 4 15

WEIGHTS.
Hitching .. ..per ℔ 2¼c
Sash—F.O.B. Chicago...pr ton $21 00

WHEEL BARROWS.
Common Railroad....per doz..$15 50
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Favorite Steel Tray.. " .. 25 00
No. 04 Steel Dirt.... " .. 47 00
No. 04½ " " .... " .. 50 00

WHEELS.
Corundum ....70&10&5%
Emery ....75&5%

Well In.	8	10	12	14
Per doz.....	$1.90	$2.20	$3.00	$5.50

WIRE.

Barbed	Painted.	Galv'd.
Carloads..per 100 lbs..	$2.10	$2.40
Less than car " ..	2.10	2.40

Brass.
In coils.......................... 20%
In 1 ℔ spools, new list......50&10%
Broom—Tinned........60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.................20&10% 33⅓%
In 1 ℔ spools, new list .. 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $1.95
Nos. 6 to 9, Galvl'd... " 2.25
Hair—New list................50&10%
Market.
Bright, full bdles.............70&10%
Bright, broken bdles 70%
Coppered, full bdles . 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.......... 70&5%
Tinned, broken bdles.......65&10%
Picture—In coils....... 80%@80&10%
In 5 ℔. spools ....per ℔..26c
Plain—Small lots.............. $2.00
Car lots 1.95
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard................ .75%
Alligator ....85&10%
Always Ready 60%
Bemis & Call No. 2 Improved
Pipe Wrenches. .... .80%
Coe's Standard................50&10%
Girard's Agricultural.........85&50%
Wescott's "S" 43⅓%
Malleable "S"...........per ℔. 05½c
Malleable.................. " 05½c
Stillson Pipe ....70&5%
Trimo " 80%

WRINGERS.
Clothes.
No. 22, Guarantee....per doz. $29 50
No. 110, Guarantee... " 29 50
No. 110, Brighton..... " 18 00
No. 22, Pioneer....... " 18 00
No. 2, Superb......... " 17 50
No. 730, Easy.......... " 24 00
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Ash Sifters

Hill Dryer Co., Worcester, Mass

Ammunition

Stevens, J. Arms & Tool Co., Chicopee, Mass

Augers—Post Hole

Iwan Bros., Streator, Ill

Bolts

Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Wks., Columbus, O

Brass

Merchant & Evans Co., Philadelphia, Pa

Cans

Stuber & Kuck, Peoria Ill

Carpenters' Tools

Ohio Tool Co., Columbus, O
Stanley Rule & Level Co., N. Britain, Ct

Cartridges

Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Ceilings—Metal

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Steel Roofing Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Illinois Roofing & Supply Co., Chicago, Ill
Kanneberg Roofing & Ceiling Co., Canton, O
Keighley Met. Ceiling Co. Pittsburg, Pa
Wheeling Corrugat'g Co., Wheeling, W. Va

Cement Tools

Kramer Bros. Fdy. Co., Dayton, O

Chains

Bridgeport Chain Co., Bridgeport, Ct
Oneida Community, Oneida, N.Y

Chimney Tops

Iwan Bros., Streator, Ill
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Clippers

Hotchkiss, Edward S., Bridgeport, Ct

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Hill Dryer Co., Worcester, Mass
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Victor Stamping Co., Cleveland, O

Coffee Mills

Arcade Mfg. Co., Freeport, Ill
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Berger Bros. Co., Philadelphia, Pa
Iwan Bros., Streator, Ill

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Copper

Merchant & Evans Co., Philadelphia, Pa

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

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Berger Mfg. Co., Canton, O
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Bertsch & Co., Cambridge City, Ind
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Niagara Machine & Tool Wks., Buffalo, N.Y

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Wheeling Corrugating Co., Wheeling. W. Va

Cutlery

Farwell, Ozmun, Kirk & Co., St. Paul, Minn
Ohio Tool Co., Columbus, O
Smith & Hemenway, Corp., Ltd. New York
Ulery, U. J., New York

Dampers

Arcade Mfg. Co., Freeport, Ill
Howes Co., S. M., Boston Mass
Sayre Stamping Co., Sayre, O

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Globe Mch. & Stamp Co., Cleveland, O

Door Hangers

Stowell Mfg. & Fdy. Co., South Milwaukee, Wis

Drain Cleaners

Iwan Bros., Streator, Ill

Duplicators

Daus, F. C. L., Duplicator Co., New York, N.Y

Dust Traps

Davis & Walcott, Atchison, Kas

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Garry Iron & Steel Co., Cleveland, O
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Whitacre Mfg. Co., J. E., Rockford, Ill

Egg Beaters

Taplin Mfg. Co., New Britain, Ct

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Wheeling Corrugating Co., Wheeling, W. Va.

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enamel—Iron

Nickel Plate Stove Polish Co., Chicago

Enamel Ware

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Enameling

Michigan Enameling Wks., Kalamazoo, Mich

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Denning Wire & Fence Co., Cedar Rapids, Ia

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Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers

Stuber & Kuck, Peoria, Ill

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Zucker, Levett & Loeb Co., New York

Furnaces—Hot Air

American Furn. Co., St. Louis, Mo
Beckwith, Estate, P. D. Dowagiac, Mich
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Bonnot Co., Canton, O
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Meyer Furn. Co., Peoria, Ill
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Pittsburgh Stove & Range Co., Pittsburgh, Pa
Robinson Furn. Co., Chicago, Ill
Rohrbacher & Allen, Akron, O
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Wellsburg Heating & Fdy. Co., Wellsburg, W. Va
Wise Furn. Co., Akron, O
Youngstown Furn. & Supply Co., Youngstown. O

Furnace Pipe and Fittings

Farwell, Ozmun, Kirk & Co., St. Paul, Minn
Green Fdy. & Furn. Wks., Des Moines, Ill
Meyer, F. & Bro. Co., Peoria, Ill
Mueller, L. J. Furn. Co., Milwaukee, Wis

Galvanized Tubs and Pails

Wheeling Corrugating Co., Wheeling, W. Va

General Merchandise

Butler Bros., Chicago, Ill
Lyon Bros., Chicago, Ill

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Pullman Mfg. Co., Rochester, N.
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Lee-Glass-Andreesen Hdw. Co., Omaha

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Appliances

Nat'l Heatg Appliance Co., Utica, N. Y

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Hot Water Attachments

Smith Co., Chas., Chicago, Ill

Household Inventions

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Ice Cream Freezers

North Bros. Mfg. Co., Philadelphia, Pa

Ice Picks

Arcade Mfg. Co., Freeport, Ill

Kitchen Utensils

Arcade Mfg. Co., Freeport, Ill
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Knives—Pocket

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Berger Mfg. Co., Canton, O
Pritchard-Strong Co., Rochester, N. Y

Levels

Baker-McMillen Co., Akron, O
Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., New York, N.Y
Stanley Rule & Level Co., New Britain, Ct

Lighting Systems

Detroit Heating & Lighting Co., Detroit, Mich

Mail Boxes

Brick-Williams Co., Indianapolis, Ind
Royal Mail Box Co., Cleveland, Ohio
Signal Mail Box Co., Joliet, Ill

Meat Choppers

Smith & Hemenway, Corp., Ltd. New York
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Metal Lath

Wheeling Corrugating Co., Wheeling, W. Va
Bostwick Steel Lath Co., Niles, O

Metal—Perforated

Harrington & King Perforating Co., Chicago, Ill

Metal Polish

Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles

Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
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Mice Traps

Chasse Mfg. Co., Middletown, N. Y

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Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.

Newport Sand Bank Co., Newport, Ky

Nail Pullers

Smith & Hemenway, Corp., Ltd. New York

Nuts

American Lock Nut Co., Oregon, Ill
Atlas Bolt & Screw Co., Cleveland, O
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Garland Nut & Rivet Co., Pittsburgh, Pa

Oil Cans

Cooney & Geiger, Indianapolis, Ind

Paints

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Dixon, Jos. Crucible Co., Jersey City, N.J

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Harrington & King Perforating Co., Chicago, Ill

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Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

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Chapin-Stephens Co., Pine Meadow, Ct
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Stanley Rule & Level Co., New Britain, Ct

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Utica Drop Forge & Tool Co., Utica, N.Y

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United States Register Co., Battle Creek, Mich

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Berger Mfg. Co., Canton, O
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Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
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La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Reeves Mfg. Co., Canal Dover, O
Sykes Steel Roofing Co., Chicago, Ill

Roofing Cement

Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint

Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O
Stowell Mfg. Co., Jersey City, N.J

Rules

Chapin-Stephens Co., Pine Meadow, Ct
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

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Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Sash Balances

Grand Rapids Hdw. Co., Grand Rapids, Mich
Pullman Mfg. Co., Rochester, N.Y

Saw and Saw Sets

Atkins, E. C. & Co., Indianapolis, Ind
Disston, Henry & Sons, Philadelphia, Pa

Scales

Beckman Bros., Des Moines, Ia
Osgood Scale Co., Binghamton, N.Y

School of Salesmanship

Sheldon School, Chicago

Screen Door Check

Pullman Mfg. Co., Rochester, N.Y

Screen Hinges

Kees, F. D., Beatrice, Neb

Screens—Perforated Metal

Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator

Harrington & King Perforating Co. Chicago, Ill

Screws

Atlas Bolt & Screw Co., Cleveland, O
Columbus Bolt Works, Columbus, O

Screws—Hand

Chapin-Stephens Co., Pine Meadow, Ct
Ohio Tool Co., Columbus, O

Screw Drivers

North Bros. Mfg. Co., Philadelphia, Pa
Smith & Hemenway, Corp., Ltd. New York

Scuttle Openers

Bickelhaupt, G., Skylight Works, New York, N. Y

Shears

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties

Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo
Kinne Mfg. Co., Minneapolis
Kinsey Mfg. Co., Dayton, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Sheets—Black and Galvanized

Berger Mfg. Co., Canton, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Planished

Ward-Dickey Steel Co., Indiana Harbor, Ind

Shelf-Brackets

Atlas Mfg. Co., New Haven, Ct

Shelving—Hardware

Heller & Co., Mont Clair, N. J
Warren, J. D. Mfg. Co., Chicago, Ill

Shovels

Avery Stamping Co., Cleveland, O

Sifters

Stuber & Kuck, Peoria, Ill

Skates—Roller

Cycle Skate & Sporting Goods Co., New York, N.Y

Skylights

Bickelhaupt, G., Skylight Works, New York, N. Y

Skylight Gearing

Bickelhaupt, G., Skylight Works, New York, N. Y
Weiss, H. & Co., New York, N.Y

Slate

Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Soldering Furnaces

Bickelhaupt, G., Skylight Works, New York, N. Y
Clayton & Lambert Mfg. Co., Detroit

Sporting Goods

Cycle Skate & Sporting Goods Co., New York, N. Y
Enterprise Mfg. Co., Akron, O

Squares, Machinists'

Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal

Avery Stamping Co., Cleveland, O
Globe Machine & Stamping Co., Cleveland, O

Staples

Titchener & Co., Binghamton, N.Y

Stones—Oil

Ulery, U. J., New York

Stoves and Ranges

Beckwith, P. D. Estate, Dowagiac, Mich
Bergstrom Stove Co., Neenah, Wis
Champion Steel Range Co., Cleveland, O
Comstock-Castle Stove Co., Quincy, Ill
Cutler & Proctor Stove Co., Peoria, Ill
Farwell, Ozmun, Kirk & Co., St. Paul, Minn
Foster Stove Co., Ironton, O
Galusha Stove Co., Rochester, N.Y
Gem City Stove Co., Dayton, O
Globe Stove & Range Co., Kokomo, Ind
Landay Steel Range Co., St. Louis
Kontny, John, Chicago, Ill
Miller Range & Furn. Co., Cincinnati, O
Nye & Son, Marietta, O
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Resor & Co., Wm., Cincinnati, O
Van, John Range Co., Cincinnati, O
White Stove Co., Thomas, Quincy, Ill
Willard, Wm. G., St. Louis, Mo

Stoves—Gas

Fanner Mfg. Co., Cleveland, O
Glazier Stove Co., Chelsea, Mich
Pittsburgh Stove & Range Co., Pittsburgh, Pa

Stoves—Oil

Glazier Stove Co., Chelsea, Mich
Silver & Co., Brooklyn, N.Y

Stove Carriers

Kramer Bros. Fdy. Co., Dayton, O

Stove Casters

Kramer Bros. Fdy. Co., Dayton, O

Stove Cement

Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay

Bridgeport Crucible Co., Bridgeport, Ct

Stove Lifters

Kramer Bros. Fdy. Co., Dayton, O

Stove Mats

Stuber & Kuck, Peoria, Ill

Stove Patterns

Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe

Kinne Mfg. Co., Minneapolis
Ohio Stove Pipe & Mfg. Co., New Philadelphia, Ohio
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W. Va

Stove Pipe Radiators

Rochester Radiator Co., Rochester, N.Y

Stove Pipe Thimbles

Stuber & Kuck, Peoria, Ill

Stove Polish

Black Silk Stove Polish Wks., Sterling, Ill
Nickel Plate Stove Polish Co., Chicago

Stove Repairs

Brauer, A. G., St. Louis, Mo
Brucker, M., Chicago
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago
Morris, Stove Repair Co., Chicago, Ill
North Western Stove Repair Co., Chicago
Reeves, S. V., Philadelphia, Pa

Stove Trimmings

Fanner Mfg. Co., Cleveland, O

Strainers—Sink

Vrooman, F. H. & E. B., Chicago, Ill

Sugar Kettles

Sperry & Co., Batavia, Ill

Tanks—Oil and Gasoline

Smith Bros. Mfg. Co., Indianapolis, Ind

Tapes

Lufkin Rule Co., Saginaw, Mich

Thermometers—Oven

Evans Stamping & Plating Co., Taunton, Mass

Thermostats

Howard Thermo. Co., West Oswego, N. Y

Tin—Perforated

Harrington & King Perforating Co., Chicago, Ill

Tinplate

Berger Mfg. Co., Canton, O
Canton Steel Roofing Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa

Tinware

Lalance & Grosjean Mfg. Co., Chicago, Ill
Stuber & Kuck, Peoria, Ill

Trowels

Atkins & Co., Indianapolis, Ind
Disston, H. & Sons, Philadelphia, Pa

Tubs and Pails

Wheeling Corrugat'g Co., Wheeling, W. Va

Valve Regulators

Howard Thermo. Co., West Oswego, N. Y

Ventilators

Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Wagons

Sycamore Wagon Works., Sycamore, Ill

Washing Machines

Blackstone Mfg. Co., Jamestown, N.Y
Benbow-Brammer Mfg. Co., St. Louis, Mo
Brammer, H. F. Mfg. Co., Davenport, Ia
Clark, Quien & Morse, Peoria, Ill
Voss Bros. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Wire Anchors

Lenawee Mfg. Co., Adrian, Mich

Wire Goods

Denning Wire & Fence Co., Cedar Rapids, Ia

Wringers—Mop

Dana Mfg. Co., Cincinnati, O

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

Wanted—To buy a neat, well selected stock of hardware and implements in a good town, where the building may be rented. Prefer not to exceed a $2,000 stock in a western town. Address J. W. Calnan, Manawa, Wis. 18

For Sale—A one-half interest in a $4,500 hardware business in northern Illinois. This business is worth a two-cent investigation to any man that considers going into the hardware field. Address "L. L. J.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18

For Sale—Hardware and stove business with good tin shop and plumbing in a good town of 2,000 inhabitants. Am doing $20,000 a year business. Wish to retire from business. Stock will invoice about $4,000. Have cleared $2,500 clear money last year. Full particulars upon application. Address Chas. Teckler, Crystal Lake, Ill. 18

For Sale—A fine clean stock of hardware, stoves, paints and oils, tin and harness shop in connection. Best portion of harness stock and fixtures invoice about $8,000. Good business; good farm country and good reason for selling. Located in eastern part of South Dakota, county seat town. Address E. B. O., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17

For Sale—Stock of hardware and implements, buildings and lots in one of the best towns in eastern Nebraska. Good farming community. Business conducted successfully for twenty-seven years by present owner, who wishes to retire on account of old age. Stock will invoice in neighborhood of $12,000; buildings and lots, $5,000. Don't write unless you have plenty of capital, as this is no trading proposition. Address "Retire," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16

For Sale—$10 for 20 inch square shear in good condition. Lot of other tools and machines at very low prices. For list and prices address F. B. Karl, Delaware, Ohio. 17

For Sale—$2,500 stock of hardware in a good dairy country about 50 miles from Chicago, also a heavy summer resort business. This is a snap for somebody. Will take $2,500 if taken at once. Reasons for selling, going west. Address, C. G. Nelson, Lake Villa, Ill. 17

For Sale—Good clean stock of general hardware in good section of southeast Nebraska. Invoice about $4,500. Good building and fixtures. Building, $3,000. Leading stock, good town, good trade, but one partner wants to retire. Address "Partner," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17

For Sale—Good paying job tin shop in Ohio. Chance for hustling tinner with small capital. Address "Tinshop," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17

Wanted—Tin shop in good location or in connection with some hardware store. Address G. A. F., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17

Wanted—Man with cash looking for good hardware business, well located in North Dakota. Fine trade established, making good profit. Other business interests reasons for selling. Address "N. D.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16

For Sale—Fine hardware, tinshop and furnace business at Baraboo, Wisconsin. Well established stock of about $12,000. Best location in town with cheap rent. Town 6,000 people. Good farming country around. Cause of sale failing health of the managing partner. Address P. E. R., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15u.f.n.

For Sale—Hardware stock doing good business in small town. Will include buildings and take some clear property. Address Hardware, Larrabee, Iowa. 18

For Sale—Stock of hardware and implements, buildings and lots in one of the best towns in eastern Nebraska. Good farming community. Business conducted successfully for 27 years by present owner, who wishes to retire on account of old age. Stock will invoice in neighborhood of $12,000; buildings and lots at $5,000. Don't write unless you have plenty of capital, as this is no trading proposition. Address "Retire," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16

TINNER'S TOOLS.

Wanted—A good set of second-hand tinner's tools. J. Meyers, Bourbon, Ind. 17

Wanted—A complete set of patterns for cast steam and water boilers. Send full description of boilers and net price complete. Address "Foundry," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17

For Sale—20 inch square shear in good condition, a bargain if taken at once. Address J. J. Amon, Perrysburg, Ohio. 15

Wanted—A heavy squaring and slitting shear, capable of cutting No. 18 gauge steel; must be in good condition. Address Will Griffen, 801 Texas Ave., Shreveport, La. 16

HELP WANTED.

Wanted—First-class tinner for roofing, spouting furnace and general job work; new tools; light shop; nine hours' work and good pay. Address White Plumbing & Heating Company, Charleston, Ill. 18

Wanted—A first-class tinner who understands furnace work. Steady place to right man. No drunks need apply. Address C. H. R., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18

Wanted—Tinner who can do plumbing and furnace work. Must be temperate and trustworthy. Will pay good wages to the right man. G. W. French, Elk Point, S. Dak. 17

Wanted—Good all around tinner who understands plumbing. J. Meyers, Bourbon, Ind. 17

Wanted—Good tinners at once that can do outdoor work. Good wages and steady work. Must be sober and reliable. Address Louis Dush, 223 Poplar St., Memphis, Tenn. 17

Wanted—A tinner who understands furnace work. Inside and outside work. Randolph Hardware Co., Randolph, Wis. 17

Wanted—Quick, good tinner and furnace man. Plenty of work and good wages. Churchill Hardware Co., Galesburg, Ill. 17

Wanted—A good all round tinner and sheet metal worker. Must be good furnace man and make estimate from plans. Strictly sober and a hustler. Steady job. State wages. Address Stoelzle, Murphysboro, Ill. 17

Wanted—Young man in hardware store; must speak German; only experienced man need apply. State age and salary wanted and give references. Address J. C. Rendtorff, 152 E. North Ave., Chicago. 17

Wanted—Hardware man spending winter on the western coast desires factory line or specialty line on commission. Address W., Lock Box 7, Humboldt, Ia. 17

Wanted—Good tinner and furnace man. Will pay $19 per week the year round and a good chance to learn the cornice business. Sober and reliable man. None others need apply. Address Post Office Box 657, Turtle Creek, Pa. (Pittsburg District), R. G. Reid. 17

Wanted—At once, a good tinner and furnace man. Must be sober, honest and reliable. State wages and experience. Address W. F. Rehbein, Grays Lake, Ill. 17

Wanted—Modeler for manufacturer of sheet metal ornaments and statuary. Steady position to the right man. Address Manufacturer, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16

Wanted—Tinner; first-class man, of good habits and character; must be thorough and competent, for general shop work. Hot air furnaces and all kinds of roofing and cornice. Permanent job, good wages. Address, giving age and experience and references, Fulton Hardware Co., Portland, Ind. 16

Wanted—First-class tinner, good on outside and inside work, pump and wind mills and understands furnace work. Can set bath tub. Steady work; no lost time. $15 per week. Better wages if man can keep helper. Town, 2,200. Address "J.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16

Wanted—Tinner who can do general tin work, and ordinary furnace and plumbing work in a town of 1,800 and help in the store when needed. To a good, sober and industrious man I will give steady work winter and summer. Young married man preferred. D. D. Baughman, Albion, Ind. 16

Wanted—Experienced tinner; must understand furnace work; steady employment to good man; must be strictly temperate; state experience and wages wanted; references required. Address D. C. Purdy & Sons, Highland Park, Ill., suburb of Chicago. 15-18

SITUATIONS WANTED.

Wanted—Position by a man as plumber and tinner; would prefer work under a good tinner and do the plumbing. For particulars address "Soon," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18

Wanted—Position by a first-class tinner, 38 years of age, 23 years' experience in all classes of work. Can work from plans; make estimates on furnace work, also hot water. Been foreman in present position for the past five years but for certain reasons desire a change. I am strictly temperate. Address Box 225, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 18

Wanted—Position by January 1st positively, by a tinner and furnace man. A plumber of 15 years' experience. Can furnish good references. Address O. K., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17

Wanted—Position as tinner, clerk or both; 16 years' experience. State wages you can pay. Want a steady job. Address A. W. Gilkerson, Burke, South Dakota. 17

Wanted — Position, by mechanical draftsman and ornamental designer of stoves, furnaces, boilers and general hardware of ten years' experience. Jos. Becwar, 120 Croton St., Cleveland, O. 16

SPECIAL NOTICES.

WANTED

Two salesmen having extensive acquaintance with the jobbing hardware and best retail hardware trade of middle and southwest states would like to take another factory line. Address Box 16, care of THE AMERICAN ARTISAN. 1t18

WANTED

A good, practical furnace salesman for western territory. MEYER FURNACE CO., Peoria, Ill. 2t-18

WANTED

Position as Traveling Salesman in Illinois or Wisconsin for a reputable stove manufacturing company with an up-to-date trademark line. Strictly on commission. Address "Competent," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. Ill 6t 13

WANTED

Wood Pattern Makers on Stove work. Address "Pattern Maker," care of AMERICAN ARTISAN.

u. f. n.

5 lb pail—6 per case

5 lb pail—6 per case

5 lb pail—6 per case

BLACK SILK STOVE POLISH WORKS

Too Busy Now to Say Anything Else.

at

Sterling, Ill.

Founded by Lewis D. Wynn.

5c liquid—3 doz per case

15c paste—3 doz per case

10c liquid—4 doz per case

10c paste—4 doz per case

SPECIAL NOTICES.

WANTED

A superintendent to take hold of a stove and range plant of about one hundred moulders with a concern that has a large established business. Prefer young man. State salary expected. Address Box 406, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4t18

WANTED

Foundry foreman for stove works. Give references and state wages. Address "Foreman Moulding," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4t18

WANTED

Foreman for mounting department in a stove foundry. References required. State wages. Address "Foreman Mounting," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4t18

WANTED.

A stove salesman of years experience offers his service to a well known trade-mark line for 1906. Territory west of the Missouri River preferred. Address Box 12, AMERICAN ARTISAN. 4t 17

WANTED.

To exchange good mill and elevator in good location. Want stock of hardware or other property.

IOWA MILL BROKERS,

4t 17 Independence, Iowa.

FOR SALE

160-acre improved farm within 2½ miles of Waterloo, Iowa; richest agricultural section of America; at low price of $75 per acre; would consider exchange for clean hardware stock not exceeding $6,000; balance cash or may remain on mortgage. J. R. BARSE, 914 E. 19th St., Minneapolis, Minn. 1t18

WANTED

Two salesmen to represent a representative boiler and furnace manufacturer, on a commission basis. One for New England states, the other for New York and tributary territory. A good opening for aggressive salesmen. Address A. N. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

WANTED

On or before January 1st, 1906, several first-class salesmen to represent a leading maker of furnaces and boilers. Permanent position at good salary to right men. Address S. S. care AMERICAN ARTISAN, 69 Dearborn St., Chicago. u.f.n.

We are prepared

to bid on specialties in metal work or manufacture them on royalty.

KINSEY MFG. CO., DAYTON, OHIO

WANTED

A-1 Superintendent for Stove Department and A-1 Superintendent for Furnace Department. Address "Superintendent," care of AMERICAN ARTISAN, 69 Dearborn St., Chicago. 4t-15

C. N. HOOPER, Dubuque, Iowa.

VITREOUS ENAMELING

TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH-WESTERN LINE

C.&N.W.RY.

Chicago & North-Western Ry.

WHICH REACHES THE FAMOUS

Water Powers, Coal Fields, Iron Ore Ranges, Hard & Soft Lumber Districts

of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr. Freight Traffic Mgr. E. D. BRIGHAM, Gen. Freight Agt.

CHICAGO.

STOVE REPAIRS

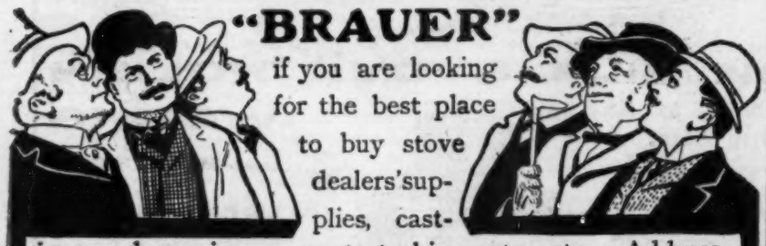
MANUFACTURERS' STOVE REPAIR CO.

517-539 Diversey Boul., CHICAGO

PROMPT SHIPMENTS
GIVE US A TRIAL

Trade HADDON Mark
On All Our Patterns.

The LEIBRANDT & McDOWELL STOVE CO.'S
STOVES and REPAIRS
SHIPPED PROMPTLY.
S. V. REEVES, 50 N. 2nd St., Philadelphia.



"BRAUER"
if you are looking for the best place to buy stove dealers' supplies, castings and repairs—promptest shipments, etc. Address,
316-318 North Third St. St. Louis, Mo.

M. BRUCKER

Manufacturer and Jobber of

Stove and Range Repairs

Repairs for all Stoves and Ranges.
Adjustable Stove Repairs a Specialty.

MICA, URNS, KNOBS, RODS AND STOVE BOLTS

325-331 North Lincoln Street
BRANCH: 229 North Wells Street
PHONE, 559 North.
CHICAGO, - ILLINOIS

THE ACME OVEN THERMOMETER

With NEW IMPROVEMENTS
is ready for your inspection

SEND FOR SAMPLE

EVANS STAMPING AND PLATING CO. Taunton, Mass.

C. H. MATTHEWS, -:- Detroit, Mich.
WESTERN AGENT.

THE ADVANTAGE OF FALL PAINTING

A short practical talk on good paint and good painting for steel work, metal and wood.
Write for a copy of the folder B-18.
Address PAINT DEPARTMENT,
JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

North Western Stove Repair Co.

No. 225-235 W. 12th St.,
CHICAGO

Largest and Best Stock in the World.

Repairs for the Oldest and Newest Stoves, Ranges and Furnaces.

WRITE FOR SUPPLEMENT TO No. 20 CATALOGUE

STOVE REPAIRS

Range Repairs
Furnace Repairs

J. L. Morris Stove Repair Co.

29-31 So. Desplaines St.,
Tel. Monroe 500. CHICAGO, ILL.

WELLER PATTERN CO
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

The GEO. W. COPE **Stove Pattern Works** Cor. Brush & Woodbridge Streets DETROIT, MICHIGAN.

PATTERNS

For Stoves and Heaters
First-class in wood and Iron.
Vedder Pattern Works, Troy, N.Y.
Established 1835

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

WHO WOULD STOOP SO LOW

as to use an ordinary Dust Pan, when they can get a "20th Century Dust Pan" for 25c, which requires no stooping, takes up the dust cleaner, and being made of the best Polished Steel, will last longer than ten ordinary Dust Pans. The people want it, and it pays to supply them with what they want.

SCHOFIELD & CO., MFRS.
FREEPORT, ILL.

THE ONLY MOLDING SAND

that may be used as mined, without admixture or previous preparation, adapted to the finest castings. Produces best work at low cost.

Highest Award at World's Fair, St. Louis.
Catalogue and information on request.

The Newport Sand Bank Co., Incorporated **Newport, Ky.**

Chicago Office, 123 Franklin St., KNAPP BROS., Representatives

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber.

Nickel Plate Stove Polish Co.,
CHICAGO.

Large 10 oz. Can.

Just a few of our
Stove Appurtenances
We manufacture a great variety of them. Find out what they are.

The Fanner Mfg. Co.
CLEVELAND, - OHIO

NONE BEATS THE

Uncle Sam Damper

It is light, easily adjustable and enduring.

The plate is stamped from best nickled steel and is corrugated to prevent warping. The stem consists of forged steel sharply pointed, notched to engage edge of plate, and is held absolutely in place.

Nothing better on the market.
SEND FOR FREE SAMPLE.

Sayre Stamping Co. Sayre, Pa.

YANKEE ALL STEEL DAMPER

VENTILATING PIPE DAMPER

SIZES, 6 in. to 15 in.

HOT AIR DAMPER.

ROD.

Enameled Wood or Nickeled Steel Handle.

OVAL SMOKE PIPE DAMPER.

SMOKE PIPE DAMPER.

WE CLAIM BEST SHEET STEEL DAMPER MADE. WE WILL SEND SAMPLE FREE TO DOUBTERS. CHEAPEST DAMPER MADE. BEST AND EASIEST TO GET IN OR OUT.

We guarantee our prices against any sheet iron damper that in any way compares.

THE S. M. HOWES CO., 40-46 Union St., Boston, Mass.

FLAT CRIMP EXPANDING ELBOWS

No. 1 | No. 2 | No. 3

Round Corrugated
Plain Round

Octagon
Polygon

Square "H"
Square "B"

PATENTED JUNE 4, 1895

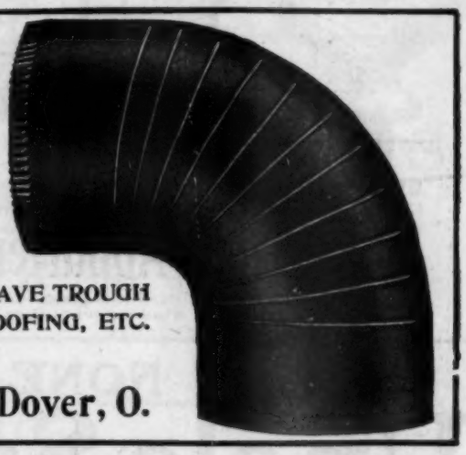
Made of One Piece

None Genuine
Without Signature

F. Dieckmann

Station B, CINCINNATI

A Few Points About
THE DOVER ELBOW



No unsightly seams or corrugations to give it a bunched appearance.
No corrugations to reduce diameter and collect soot.
It is made on a scientific principle and is the same diameter as the pipe.
The ONLY ELBOW with a smooth surface, permitting of a high polish.
Shipped in BOX CRATES, insuring perfect goods at destination.

Also Manufacturers of the

DOVER PATENT NESTED STOVE PIPE, GALVANIZED EAVE TROUGH and CONDUCTOR PIPE, CORRUGATED IRON, STEEL ROOFING, ETC.

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The Reeves Manufacturing Co., Canal Dover, O.

HANDY NESTED STOVE PIPE T JOINT

Saves 90 per cent of room.
Saves 75 per cent of freight
Does not damage in shipping.
Is stronger and neater than a hand made riveted T.
Is always ready for use.
Fastens together with two bolts.
Is a perfect fitting joint.

Never the rusty and unsightly T Joint usually offered for sale. Always neat, clean and salable. Packed ten 12-inch joints in a crate 7x8 inches and 14 inches long. Weighing 15 pounds. Made in Common, Polished Blue Steel and Planished Iron.

ASK YOUR JOBBER FOR THEM.

KINNE MANUFACTURING CO., - - - Minneapolis, Minn.

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Imitations Are Recommendations

We make the one-piece miter that others are trying to imitate. Made of special galvanized stock, true to size, shape and in all styles, single and double bead, inside or outside turn. No obstruction in slip joint.

Write for information.

Get the original.

J. E. Whitacre Mfg. Co.
ROCKFORD, ILL.

Inside Bead

CRIMPING ROLL

This Improved Crimping Roll will crimp sheets without buckling them. We build a complete line of Shears, Punches and Bending Rolls, all sizes for hand or power drive. BERTSCH & CO., Cambridge City, Ind.

THE AMERICAN ARTISAN Want Ads fill your wants.

Berger's "Classik" Steel Ceilings
Awarded the only Gold Medal at St. Louis.

Guaranteed Rehammered Charcoal Iron, Eave Trough, Conductor, Roofing, Siding, and Tin Plate.

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The only Stove Lining made of crucible materials.

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The best and most refractory lining made.

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Smith's Latest Improved Double Lock Nested Stove Pipe

Fig. 2

Construction of which is very simple, practical and just as safe as riveted pipe. Can be cut when fractional joint is required, without the use of a rivet. Guaranteed to fit perfectly.

Fig. 2 Cut shows pipe as it is being closed.

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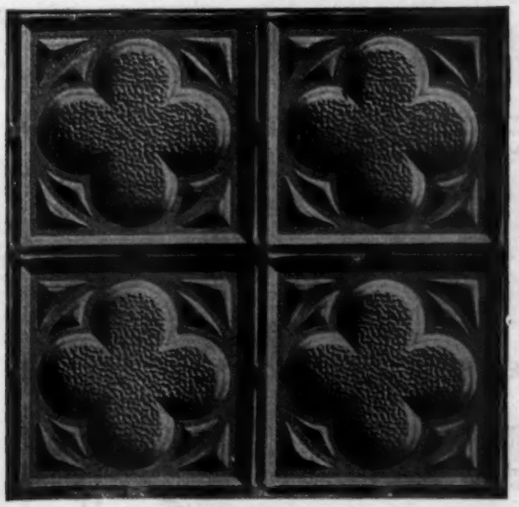

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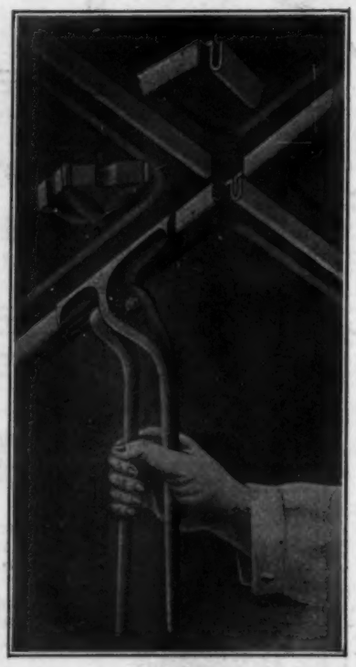

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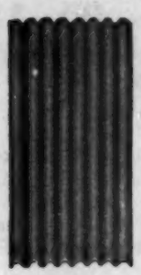

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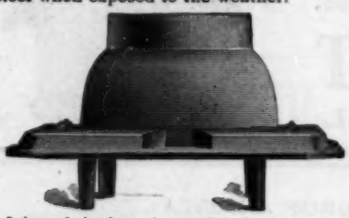

It is made in three sizes and the legs are adjustable. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

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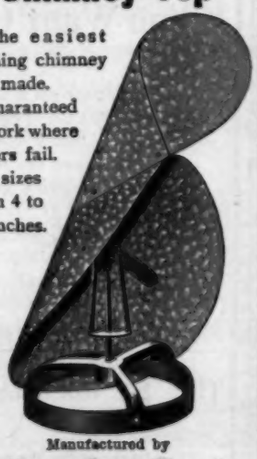

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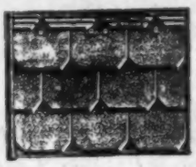

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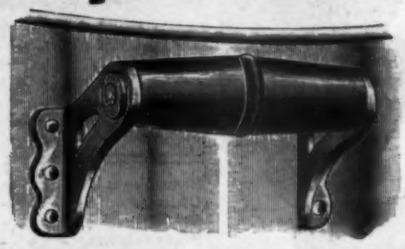

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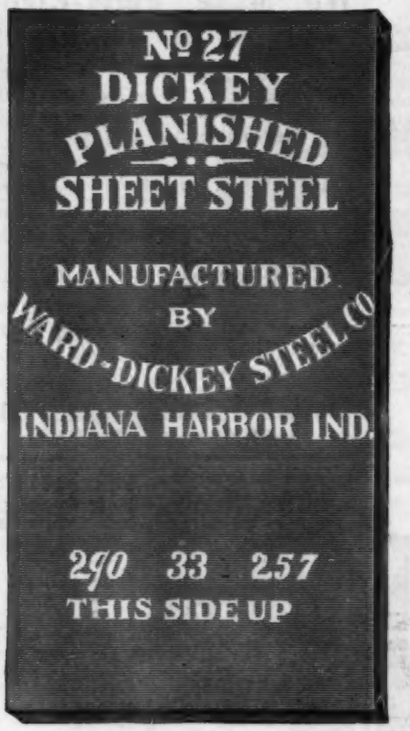

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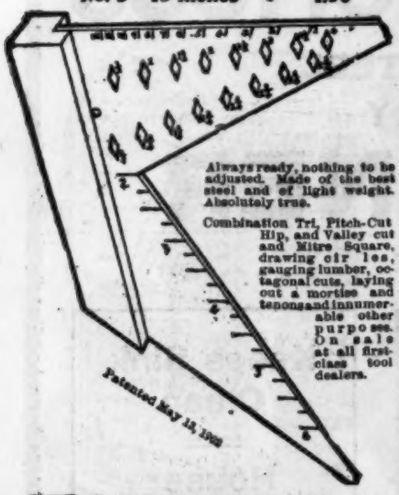

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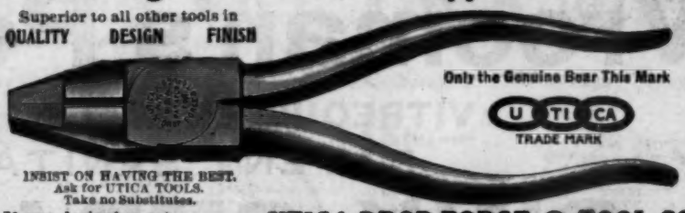

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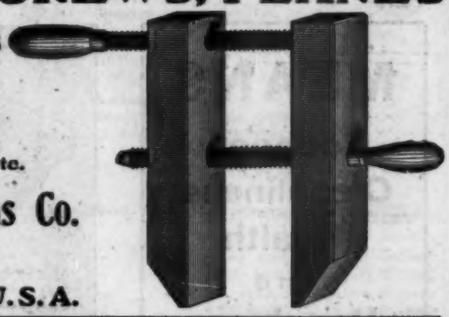

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IMPROVED CARPENTERS' TOOLS

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Fig. 4—**File,** 4 in.
Fig. 5—**Saw,** 4 in.
Fig. 6—**Chisel,** 3⅛ in.
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7 Warren Street - - NEW YORK, U.S.A.

Cabinet Makers' Benches.

No. 1 BENCH.

We are the largest manufacturers of Benches in the World.

Write for catalog describing our complete line of Cabinet, Carvers, Pattern Makers and Manual Training Benches, Hand Screws, Cabinet Makers' Clamps, etc.

Grand Rapids Hand Screw Co.,
160 South Ionia Street, Grand Rapids, Mich.

HOTCHKISS CLIPPERS

Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 350 B. B.

Send for Descriptive Catalogue and Prices.

EDWARD S. HOTCHKISS,
IRANISTAN AVE., BRIDGEPORT, CONN.

1905
Ocean Wave Washer
With Covered Gear

You want the exclusive agency?
WRITE US.

VOSS BROS. MFG. CO.
Davenport, Iowa

BALL-BEARING

"GRAND RAPIDS"

ALL STEEL SASH PULLEYS

are the greatest selling goods on the market anywhere. We are the largest makers of sash pulleys in the world. The "GRAND RAPIDS" are the standard sash pulleys. We make nothing but sash pulleys, so, naturally our goods excel.

We own twenty-three patents on sash pulleys, therefore our goods are exclusive. Nearly all jobbers sell the "GRAND RAPIDS." Write us for free samples, catalogue and discount.

THE GRAND RAPIDS HARDWARE COMPANY,
Manufacturers
61 Pearl Street, GRAND RAPIDS, MICH.

SOMETHING NEW
IMPERIAL ROTARY WASHER

Has sliding cylinder on square steel post, insuring greatest strength of any rotary gearing. Has *all steel roller bearings* making it NOISELESS, speedy and easy to turn.

Handsomely finished. All castings are in Gold and Aluminum Bronze. Extra large tub with plenty of room for Wringer.

Hardware men will search long to find a machine equal to our Ball-bearing Imperial Rotary as a seller.

With its many improvements it is a good investment for both dealer and user. Write us for Catalogue and we will show you the most complete line of Washers in the market.

THE BLACKSTONE MANUFACTURING COMPANY, Jamestown, New York
Oldest and largest makers of Washing Machines in the United States. Established 1871.

THE SMILE
THAT WONT COME OFF
Is always worn by the THRIFTY HOUSEWIFE who uses a

WHITE LILY WASHING MACHINE

WRITE FOR EXCLUSIVE AGENCY
WHITE LILY WASHER CO.
TOLEDO, OHIO. DAVENPORT, IOWA

Be up-to-date, Mr. Dealer

and get the best the land affords.

We guarantee that

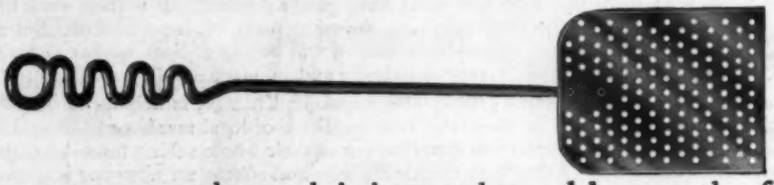
The Schroeder
Roller Gearing Rotary
Washer

hits the mark in this respect every time. Best constructed. Handsomest finished. Easiest to operate and fully guaranteed.

Benbow-Brammer Mfg. Co.
ST. LOUIS, MO.

Why do some business men set aside sums of money for advertising that would be enough for some people to live on?

EVERY GOOD COOK WILL SEE THE MERITS OF THIS TURNER

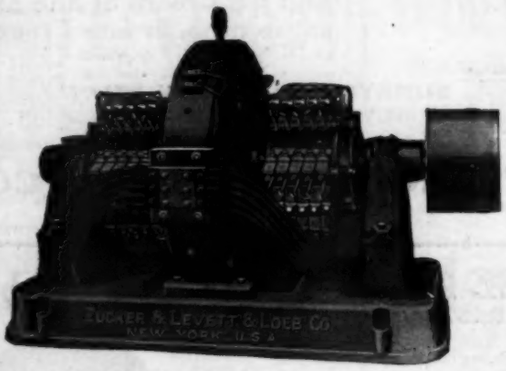


No. 50

The grease passes through it instantly and leaves the food light and tempting. Easily cleaned. Made entirely of steel. A firm, cool grip. Will last a life time. Costs no more than a poor one.

Our catalog contains some 400 good things, and can be had for the asking. Risk a postal card on it anyway.

ARCADE MFG., CO., FREEPORT, ILL. DEPARTMENT OF DOMESTIC ECONOMY



Electro Plating Outfits

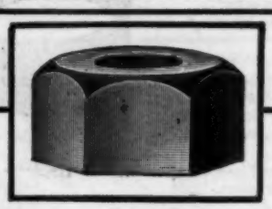
LOW VOLTAGE DYNAMOS and DIRECT CONNECTED SETS

—ALL SIZES—

We manufacture everything required for Polishing and Plating

SEND FOR CATALOGUE

ZUCKER & LEVETT & LOEB CO.
526-530 West 25th Street
NEW YORK, U.S.A.



Cold Punched NUTS

HIGH GRADE
GOOD LOOKING
ACCURATE

Semi-Finished NUTS

GARLAND NUT & RIVET CO.
PITTSBURGH, PA.

Don't wait until some other Hardware Merchant is selling all the O. K. Washing Machines in your vicinity.

Take up their sale now—before some of your competitors—and you'll have the prestige of being first to sell the O. K. Washing Machine. The O. K. Washers are a little better, and a little different from other Washing Machines.

Our little booklet tells all about them. Free on request.

H. F. BRAMMER MFG. CO., Davenport, Iowa

Lightning Portable Hand Punches

Made in several sizes, capacity up to 1-4 inch iron.

Manufactured by AMERICAN LOCK NUT CO., Oregon, Illinois

Send for catalog and price list to-day.

How Is Your Trade?

THERE are many signs around us of a booming trade this winter. Are you ready to take your share? Do you wish your enterprise to grow and prosper? This is the question for every business man and business manager.

To hold your place in the procession you must have good salesmen. It is their work to push out the goods and pile up the profits. Large and profitable sales are what make business flourish. But no such result can be won by slipshod methods or men. Every salesman should be a proficient worker and a type of manly qualities as well. Only such workers can create confidence and build up solidly as well as get the business.

Do you know that The Sheldon School (1571) The Republic, Chicago, is helping salesmen and others to the highest efficiency and developing in them the best qualities of loyal manhood? Over 12,000 students have now enrolled with us and many prominent firms have had their whole selling force take the instruction. It is an easy correspondence teaching that bars no other duties and effects an all-round improvement of 10% to 50%. Send for and read our literature and you will clearly see why it does so. Prepare for the selling boom by vitalizing the selling force.

LOCATIONS
FOR INDUSTRIES

ERIE RAILROAD SYSTEM
CHICAGO TO NEW YORK

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, and can advise with manufacturers of specific products as to suitable locations, furnishing them with current information of a comprehensive nature, dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America.

Every section of the System has its particular merits. It has great general and coal, oil and natural gas resources.

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between Chicago and New York.

Manufacturers' inquiries as to locations are treated in strict confidence and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company
21 Cortlandt Street, NEW YORK

"AMERICAN"
(2 in 1)
TWIN FREEZER

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer

SOMETHING ENTIRELY NEW NEVER DONE BEFORE

Ask Your Jobber About it.

Send for New Freezer Catalog.

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

The ECLIPSE Nested Stove Pipe Thimble
BEST ON THE MARKET

PATENT PENDING

Saves 80 per cent. of room.
Is stronger than a hand made riveted thimble.
Is always ready to hook together.
Is made that the lug passes through two slots and then tied.
The lug is always on top; therefore the LUG is not an objection to the entering stove pipe.
It is always kept nice and clean in a box; therefore no unsightly, rusty looking thimbles to adorn the stores. Galvanized iron; 5, 6 and 7 inch.

STUBER & KUCK, Manufacturers of Pieced Tinware and all Styles Flour Sifters. **Peoria, Ill.**
Watch for our next advt.

WHEN a logger places a wedge in a log and hits it a blow he does not know how much of a split the effort will make, but he does know that if he continues to hit the wedge the log will soon lie in twain. The driving wedge to business is advertising. You cannot expect to make your success with a single ad, no matter how large. Continual rapping does it.

Our Factory Brands

Being our Standing Guarantee of Uniform Quality, Style and Finish.

"NEVER-BREAK"

Steel Spiders	Garden Trowels
Griddles	Post Hole Diggers
Kettles	Fence Posts
Maslins	Wrought Hook Plates
Scotch Bowls	Felloe Plates

"NEVER-BREAK" Shovels, Spades and Scoops.
"NATIONAL" Shovels, Spades and Scoops.
"BUCKEYE" Shovels, Spades and Scoops.
"MOHAWK" Shovels, Spades and Scoops.
"KNOX-ALL" Extra Heavy Railroad Shovels.
"ALASKA" Steel Snow Shovels.
"TROPIC" Ash or Furnace Shovels.
"KLONDYKE" Sidewalk Cleaners.
"SOLID-STEEL" Sidewalk Cleaners.

The AVERY STAMPING CO.
CLEVELAND, OHIO.
Catalogue.

ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power

Send for circulars

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 159 Vincent St., CLEVELAND, O.

What Is Daus' Tip-Top?

TO PROVE that Daus' "Tip Top" is the best and simplest device for making 100 Copies from pen-written and 50 Copies from typewritten original, we will ship complete duplicator, cap size, without deposit, on ten (10) days' trial.
Price $7.50 less trade discount of 33⅓% or $5 net

The Felix C. J. Daus Dup. Co., Daus Bldg. 111 John St., N.Y.City

Write for Our Circulars

and we will tell you what's doing in the Fence Anchor business.

The only Anchor made for between the posts and for corner posts.

LENAWEE MFG. CO.
ADRIAN, MICH.

A Seasonable Article — For this Fall & Winter

The 20th Century White Flame
HEAT & LIGHT IN ONE

Wholesalers Are Placing Their Orders Now To Insure Supply for the Fall and Winter Demand.

GAS BURNERS GIVING HEAT AND LIGHT
At Cost of LIGHT ONLY.

FITS ANY GAS FIXTURE—HEATS AND LIGHTS ANY ROOM.
RETAILS AT $1.25—Good Margin for Jobber and Retailer—Big Seller.

For fuller particulars, address,

20TH CENTURY MFG. COMPANY, 19 Warren Street, N. Y.
Manufacturers of the Famous Bicycle and Automobile Headlights

YOUR STOCK ORDER for SPRING GOODS

should include Iwan Post Hole and Well Augers to save delay when the spring rush starts. You'll need them anyway, so kindly favor us by placing your order with your jobber quickly.

The thousands of dealers selling these augers will please take notice. The Iwan Post Hole Auger is the most largely sold, and the most prominently advertised earth auger on the market. Our advertising reaches all classes of consumers who have use for a post hole auger.

Three full turns of the auger, and it is full of earth, and lots of it. Makes a hole smoothly and quickly; empties easily, and is very durable.

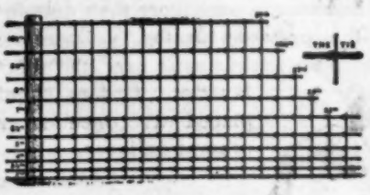
Sizes: 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14 inch,

Don't neglect to include them in your stock order

IWAN BROTHERS, Streator, Ill.

Manufacturers of Post Hole Augers and Diggers, Ditching Hoes and Spades, Hay Knives, Revolving Chimney Tops, Etc.

The Fence That Suits



Your Customer
is the one for you to handle

Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything.
Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

SEND FOR CATALOGUE.

THE DENNING WIRE & FENCE CO.
CEDAR RAPIDS, - IOWA

THE
"BIG FOUR ROUTE"

passes through an interesting Country every mile of the way

CHICAGO TO
INDIANAPOLIS
CINCINNATI
LOUISVILLE
and all points
SOUTH
AND
SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. Rys. For reservations, etc., call on or address

I. P. SPINING, G. N. A.
239 Clark Street - - - CHICAGO

THE WARREN SYSTEM

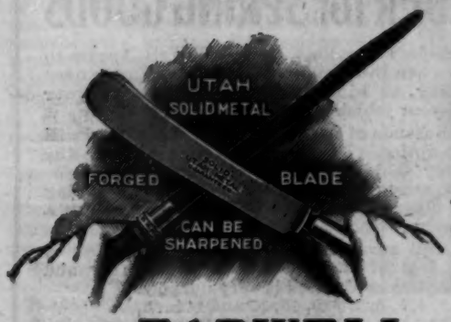
AS WE FOUND IT

AS WE HAVE MADE IT

J. D. WARREN MFG. CO., :: CHICAGO, U. S. A.

SOMETHING BETTER

Than Silver Plate.



UTAH SOLID METAL

KNIVES, FORKS AND SPOONS

The same pure bright metal clear through—no plating to wear off. No experiment. They have stood the test of years, never failing to give satisfaction and will last a life time. Besides "Utah" Knives will cut. Write for further particulars and prices.

FARWELL, OZMUN, KIRK & CO.

Wholesale Distributors ST. PAUL, MINN.

The "HUSTLER" Ash Sifter

Is a Winner. Pleases Everybody

Sales last season were more than double those of the previous season. Dealers everywhere are enthusiastic over the sale of the Hustler. Orders should be placed at once to insure prompt delivery.

Send for Catalogue and Prices.

Hill Dryer Company

Also Manufacturers of Hill's Famous Dryers

WORCESTER, MASS., U. S. A.

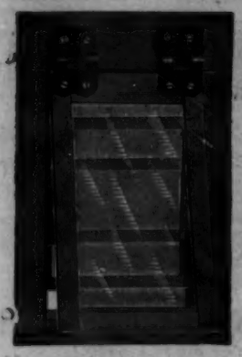
Automobile Cycle Skate

Our Newest Model. One Size Extension, 10 to 12 in.

Ball bearings, 5-in. rubber-tired wheels, metal parts sheet steel, finely nickel-plated. Retail $10 per pair; with 4-in. wheel, $7.50 per pair.

Every dealer in Hardware, Sporting Goods, etc., will find it profitable to sell our line of Cycle Skates, as they appeal to both young and old, being adapted for use in skating rinks or on smooth sidewalks. Write for catalogue and trade discounts.

CYCLE SKATE AND SPORTING GOODS COMPANY,
57 Park Street, New York



Full length window screens keep out all the flies and protect the windows. Screens attached with

GOSSETT'S Detachable Suspension HINGES

are easily put up or removed—no tools or ladder necessary. Write for free sample pair.
Sold by Hardware Jobbers and Dealers.
Manufactured by

F. D. KEES, Beatrice, Neb.

This Label on all Taplin's Pat. Improved Dover Egg Beaters stands for Quality and Durability.
THE TAPLIN MFG. CO., New Britain, Conn., U.S.A.
156 Chambers St., New York.

An Up-to-Date Hardware Delivery Wagon

is what you will need this Fall for delivering your stoves and furnaces. You can handle your goods cheaper, easier and quicker on our low-down short-turn delivery wagons than on any other kind. Body twenty inches from the ground, full width, regular height wheels, and yet wagon will turn as short as any cut-under wagon with a reach.

Easy to Load and Light of Draft

No enterprising, economical merchant can afford to buy or use any other wagon. Built upon honor from the best of material and by experienced workmen. We make many styles suitable for all kinds of trade, hardware, furniture, piano, grocery, milk, laundry, bakery, meat. Complete catalog on request. Mention this paper and address in full,

Sycamore Wagon Works

109 Edwards Street Sycamore, Illinois

A Business Man's Reputation

will be good or bad just as he is careful about the small rivet in a furnace, the pin hole in a roofing plate or the bottom of a coal hod. People judge by small things.

The bottom of the

Victor

coal hod is reinforced. It will last forever. It costs a

trifle more because of the extra profits allowed the dealer, but this is more than offset by its durability, its attractiveness. Its use will give the retailer a reputation for honor and pride.

Ask about Victor Water Pails and Wash Tubs.

The Victor Stamping Company
Broadway, LOVELAND, OHIO

SPERRY'S CALDRONS

Full measure, guaranteed perfect original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

Twelve sizes always in stock.

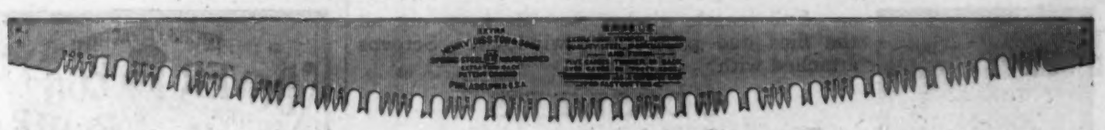
D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

The World's Standard "Pullman" Coil Door Springs

Malleable Iron Hooks
No. 209 Japanned Screw Eyes
We are booking orders now for Spring Delivery
Price guaranteed to date of shipment

PULLMAN MFG. CO., Rochester, N. Y.

Advertising is the root of all money.



Quality Tells

That's why Disston's Saws are known throughout the world. It has taken years of patient experimenting and great expenditure of money to bring Disston's Saws to the point of perfection which they have attained. Lumbermen can attest to the superiority of our saws. Hardware men know they are good because of the many sales made, and customers know they are good because they have withstood the wear and tear of time and toil.

HENRY DISSTON & SONS
Keystone Saw, File and Tool Works
PHILADELPHIA, PA.

"BLUE BOOK" CREDITS

—OF THE—

Iron, Steel, Hardware, Stoves, Tinware, Plumbing, Etc., Trades.

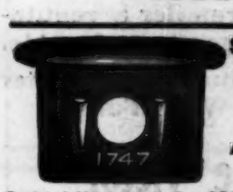
This Agency issues as complete and reliable book of credit ratings to this special branch of trade as has ever been published, containing about 400,000 rated names of wholesalers, retailers and manufacturers, covering the trade thoroughly. The ratings are conservative and very reliable. The *paying record* is based upon *ledger experience* of credit men everywhere.

You buy credit information. Isn't it the part of a good buyer to post himself thoroughly on the merits of a book of ratings, gotten up especially for his trade by men with ample capital and who are thoroughly trained in this class of work and who make a *specialty* of it?

Terms of subscription can be had by addressing Executive Office

Iron and Hardware Mercantile Agency.

157 Federal Street. BOSTON, MASS.



SAWYER'S AXE and HAMMER WEDGES ARE THE BEST.
Ask your Dealer or Write us.
Smith & Hemenway Co. 296 Broadway, N. Y.

GUS WINTERBERG,
Sandwich, Ill., writes:

"Please stop my advertisement for tinner, or furnish me with a bookkeeper, as I cannot attend to all the mail that I receive."

The Best Floor Spring Hinges are the best for you to sell. Cheap Hinges always come home to roost.

MATCHLESS Ball-Bearing Floor Spring Hinges are made to sell—*and to stay sold.*

The Ball-Bearings insure easy, noiseless motion,—the Spring gives the power, and never wears out or breaks.

Don't hesitate to send for our prices!

Address Dept. A.

LAWSON MFG. CO. 40 Dearborn St., CHICAGO 101 Reade St., NEW YORK

The Success of the Peerless Iceland

led us to make other things which appeal to the women in the home and are handled by the same jobbers and retailers. The trade, we think, recognizes that they can count on us to help move anything we make.

Peerless Iceland Freezer

(Ice Cream in Three Minutes)

Simplest freezer made. Patented dasher does the work. Better than ever this year. The product of our new factory—better facilities. This, and strong advertising make it the Freezer the women ask for.

Frezo Freezer

An excellent freezer, double scrapers fastened same way as in Peerless Iceland. All sizes.

Dana Mop Wringer

Wrings the mop dry in five seconds—does it without wetting the hands and without danger of upsetting the bucket and wetting the feet. You stand in a natural position—both feet rest firmly on the floor. The latest, the simplest, the best Mop Wringer on the market.

Dana Iceless Refrigerator

For the window. No ice bill. A refrigerator that takes up no floor space and is run without ice eight months in the year.

Ask your jobber.

The Dana Mfg. Co.

New York, 10 Warren St. **Cincinnati.**

(*For the Window*)

A FEW REASONS WHY

"PRISCO" LANTERNS

ARE BETTER.

CANNOT BLOW OUT.

AT THE WASHINGTON CONVENTION

Our full line will be demonstrated by our Mr. C. M. Avery, who will give you all the particulars and show WHY.

THE PRITCHARD-STRONG CO.

25 CIRCLE STREET :: :: ROCHESTER, N. Y.

A SQUARE DEAL

—FOR—

Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square"—honest all through. For forty years we have been giving all dealers the "square deal."

We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public, of all the world, about their merits. Square Dealers *distribute* them—they are already *sold*. Just ahead is the big demand for

"ENTERPRISE"

Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new booklet: "The Cook, Her Critic and—". We will send you a supply of these on request.

The Enterprise Manufacturing Co. of Pa.

New York Office, 10 Warren St. — Philadelphia, U. S. A. — San Francisco Office, 105 Front St.

Are You Buying Your Money's Worth?

You can't be doing that unless you know what we are offering.

It's easy to know exactly what we have to offer in more than fifty departments for we sell by catalogue only in which we quote our only prices net and guaranteed.

This catalogue brings us more business every year than could be brought by half a thousand roadmen and thousands of the shrewdest retailers never sign an order until they have consulted its pages.

The current number is our Santa Claus Catalogue which shows complete our holiday goods and all our regular lines as well. You are welcome to a copy—provided you are a merchant.

Ask for Catalogue No. MC556—the Santa Claus Edition.

BUTLER BROTHERS

Wholesalers of Everything
By Catalogue Only

NEW YORK CHICAGO ST. LOUIS

On the numerous shelves and in the almost numberless bins and cases of the

LEE-GLASS-ANDREESEN
HARDWARE COMPANY

are some of the following

COLD WEATHER SPECIALTIES:

Skates,	Stove Boards,
Skate Buckles,	Stove Backs,
Snow Shovels,	Stove Brushes,
Sleigh Bells,	Stove Pans,
Sleds,	Stove Pipe and Elbows,
Shot Guns,	Stove Pipe Dampers,
Horse Blankets,	Coal Hods,
Weather Strips,	Coal Shovels,

CHRISTMAS CUTLERY OF ALL SORTS.

They are ready for shipment at a moment's notice.

LEE-GLASS-ANDREESEN HARDWARE COMPANY
OMAHA, NEB.

STEVENS

Mr. Hardware and Sporting Goods Dealer:

IT IS a business axiom that a live, up-to-date merchant wishes to handle only such stock as sells readily. This means that the goods must have intrinsic merit and be well known. Furthermore, the enterprising retailer is anxious to obtain a first-rate profit, and should be protected in that profit. Then, again, the goods must stay sold. These essential contributary elements to a popular and meritorious Firearm line are all perfectly embodied in the famous

"STEVENS"

RIFLES, PISTOLS, SHOTGUNS, Rifle Telescopes, "Stevens-Pope" Rifle Barrels, Shotgun Cleaners, Rifle Cleaning Rods, Sights, Etc.

Your Jobber Can Supply You

Send for Our Complete Catalog

J. Stevens Arms & Tool Co.

No. 460 MAIN STREET
CHICOPEE FALLS, MASS.

McClure's Roofing Tin

Better values for your money in roofing tin than you've ever had before. **Let us prove it.**
Write for samples and prices.

The McClure Co.

Pittsburgh Philadelphia

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address

EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

Sheet STEEL

ROOFING Tin **Makers** **BRIGHT Tin**

FOLLANSBEE BROTHERS COMPANY, Pittsburgh

Tinners Find Employment
By advertising and using
THE POWERS AUTOMATIC CHIMNEY TOPS

They make chimneys draw, give Tinners employment making stocks, and give the dealers profit

Sold by Hardware Jobbers and Dealers.

Made only by **POWERS BROS. STREATOR, ILL.**

This cut free to dealers.

The "CENTENNIAL" RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Patent applied for. Manufactured only by

COONEY & GEIGER, 19 and 21 East South St., INDIANAPOLIS, IND.

Don't place your Fall orders for Roofing Tin until you receive our Special Price List.

Remember, we're Headquarters for Tin Plates of 11 kinds,— Roofing Tin particularly.

We carry in stock, ready for immediate shipment, many different brands,—everyone fully dependable.

But write us for the Special Price List, and you'll understand what we mean.

ILLINOIS ROOFING & SUPPLY CO., 23 Lake Street, CHICAGO.

Largest In the World.

The largest plant in the world for the manufacture of sporting goods is devoted to turning out the popular line of

Pflueger's Fine Fishing Tackle

PFLUEGER'S PATENTED REVERSIBLE HINGE INSURES FREE SPINNING AND PREVENTS BENDING OR BREAKING

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